Index of Authors

AGRAWAL, H. C. *see* VOLPE, J. J. 701–703
ALI, T. A. J. *see* ROWSELL, K. V. 357–363
ANDERSEN, K.-J., VON DER LIPPE, G., MØRKRID, L. & SCHJØNSBY, H. Purification and characterization of guinea-pig intestinal brush borders 157–159
ANDREWS, T. M. *see* BLACKBURN, M. J. 697–700
ANTHONY, C. *see* WIDDOWSON, D. 349–356
ARIEL, N. & AVI-DOR, Y. Chloride-dependent restoration of coupling by oligomycin in rat liver mitochondria 115–119
ARINZE, I. J. & ROWLEY, D. L. Gluconeogenesis by isolated guinea-pig liver parenchymal cells 393–399
ARONSON, N. N., Jr. *see* LABADIE, J. H. 271–279
AURICCHIO, F., SATRIANO, R., ROTONDI, A., QUIRINO, A. & BRESCIANI, F. Polyphasic changes in incorporation of precursors into ribonucleic acid of oestradiol-stimulated mammary gland 211–216
AVI-DOR, Y. *see* ARIEL, N. 115–119
AVILA, J. L. & CONVIT, J. Inhibition of leucocytic lysosomal enzymes by glycosaminoglycans *in vitro* 57–64

BALDY, W. J. *see* LOTLIKAR, P. D. 705–708
BARBIROLI, B., BOVINA, C., TOLOMELLI, B. & MARCHETTI, M. Folate metabolism in the rat liver during regeneration after partial hepatectomy 229–232
BATES, D. J. *see* MOWBRAY, J. 583–592
BEIS, I. & NEWSHOLME, E. A. The contents of adenine nucleotides, phosphagens and some glycolytic intermediates in resting muscles from vertebrates and invertebrates 23–32
BERNE, C. The metabolism of lipids in mouse pancreatic islets. The biosynthesis of triacylglycerols and phospholipids 667–673
BERNE, C. The metabolism of lipids in mouse pancreatic islets. The oxidation of fatty acids and ketone bodies 661–666
BILMAZES, C. *see* HAVERBERG, L. N. 503–510
BLACKBURN, M. J., ANDREWS, T. M. & WATTS, R. W. E. An investigation of the location and possible compartmentation of the precursor pool of phenylalanine for protein synthesis in human granulocytes 697–700
BONTEMPS, F. *see* HUE, L. 105–114
BOUDET, A., HUMPHREY, T. J. & DAVIES, D. D. The measurement of protein turnover by density labelling 409–416
BOURRILLON, R. *see* ROGUET, R. 421–423
BOVINA, C. *see* BARBIROLI, B. 229–232
BRAMLEY, T. A. Treatment of immature mice with gonadotrophins. The influence of mouse age on the response of ovarian alkaline phosphatase activities to gonadotrophins 365–372
BREMER, H. *see* YOUNG, R. 243–254
BRESCIANI, F. *see* AURICCHIO, F. 211–216
BRINDLEY, D. N. *see* LLOYD-DAVIES, K. A. 39–49; SHORT, V. J. 675–679
BROPHY, P. J. & VANCE, D. E. Elongation of fatty acids by microsomal fractions from the brain of the developing rat 495–501
BUCKE, C. *see* PINDAR, D. F. 617–622
BURNS, A. *see* WATT, G. D. 33–37

CALDARERA, C. M., CASTI, A., GUARNIERI, C. & MORUZZI, G. Regulation of ribonucleic acid synthesis by polyamines. Reversal by spermine of inhibition by methylglyoxal bis(guanylhydrazone) of ribonucleic acid synthesis and histone acetylation in rabbit heart 91–98
CAMPBELL, A. K. & DORMER, R. L. The permeability to calcium of pigeon erythrocyte 'ghosts' studied by using the calcium-activated luminescent protein, obelin 255–265
CAPITO, K. *see* HEDESKOV, C. J. 571–576
CASTI, A. *see* CALDARERA, C. M. 91–98
CHAPMAN, K. P. *see* LABADIE, J. H. 271–279
CHAVIN, S. I. & HOLLIMAN, A. Reconstitution of pig lymphocyte plasma membranes from solubilized components, with particular reference to membrane-associated immunoglobulins 267–270
CLAUSEN, T. *see* MARTIN, B. R. 121–129
COLEMAN, R. *see* LEWIS, B. A. 71–84
CONVIT, J. *see* AVILA, J. L. 57–64
COOK, I. F. *see* JOHNSON, P. 303–311
COOTE, J. G. *see* GLENN, A. R. 85–89
CORNELL, N. W. *see* LUND, P. 593–599
COSTA, N. D. & SNOSWELL, A. M. Acetyl-coenzyme A hydrolase, an artifact? The conversion of acetyl-coenzyme A into acetate by the combined action of carnitine acetyltransferase and acetylcarnitine hydrolase 167–172
COSTA, N. D. & SNOSWELL, A. M. Enzymic hydrolysis of acetylcarnitine in liver from rats, sheep and cows 161–166
CRIPPS, R. E. The microbial metabolism of acetophenone. Metabolism of acetophenone and some chloroacetophenones by an *Arthrobacter* species 233–241
CRYER, A., MCDONALD, A., WILLIAMS, E. R. & ROBINSON, D. S. Colchicine inhibition of the heparin-stimulated release of clearing-factor lipase from isolated fat-cells 717–720
CUNNINGHAM, V. J. *see* HEATH, D. F. 417–420

DAVIES, D. D. *see* BOUDET, A. 409–416
DAVIES, J. A. *see* MOWBRAY, J. 583–592
DAWSON, A. P. & SELWYN, M. J. The action of tributyltin on energy coupling in coupling-factor-deficient submitochondrial particles 333–339
DEANS, J. A. *see* WILKINSON, B. J. 561–569
DECKELBAUM, L. *see* HAVERBERG, L. N. 503–510
DE WOLF, M. J. S. *see* HILDERSON, H. J. J. 601–607
DIERICK, W. S. H. *see* HILDERSON, H. J. J. 601–607
DILS, R. *see* SHORT, V. J. 675–679
DORLING, P. R., QUINN, P. S. & JUDAH, J. D. Evidence for the coupling of biosynthesis and secretion of serum albumin in the rat. The effect of colchicine on albumin production 341–348
DORMER, R. L. *see* CAMPBELL, A. K. 255–265
DOWNIE, J. A. *see* GARLAND, P. B. 547–559
DREIZE, M. A. *see* ZIBOH, V. A. 281–289
DUTTON, G. J. *see* WISHART, G. J. 325–331
DWYER, E. N. *see* LOTLIKAR, P. D. 705–708

EAKIN, R. T., MORGAN, L. O. & MATWIYOFF, N. A. Carbon-13 nuclear-magnetic-resonance spectroscopy of whole cells and of cytochrome *c* from *Neurospora crassa* grown with [*S*-*Me*-^{13}C]methionine 529–535
EICHENTOPF, B. *see* SEILER, N. 201–210
ELKIN, A. *see* LEWIS, B. A. 71–84
ELLAR, D. J. *see* WILKINSON, B. J. 561–569
ELLORY, J. C. *see* YOUNG, J. D. 713–715
ERIKSSON, C. J. P., MARSELOS, M. & KOIVULA, T. Role of cytosolic rat liver aldehyde dehydrogenase in the oxidation of acetaldehyde during ethanol metabolism *in vivo* 709–712

FATTERPAKER, P. *see* RAJWADE, M. S. 379–387
FUJIMOTO, K. *see* VOLPE, J. J. 701–703

GARLAND, P. B., DOWNIE, J. A. & HADDOCK, B. A. Proton translocation and the respiratory nitrate reductase of *Escherichia coli* 547–559
GEORGE, G. A. & HEATON, F. W. Changes in cellular composition during magnesium deficiency 609–615
GLENN, A. R. & COOTE, J. G. Cytochemical studies on alkaline phosphatase production during sporulation in *Bacillus subtilis* 85–89
GLIEMANN, J. *see* MARTIN, B. R. 121–129
GOODWIN, T. W. *see* JOHNSON, P. 303–311
GRANT, M. E. *see* HARWOOD, R. 291–302
GRIFFITHS, W. T. Characterization of the terminal stages of chlorophyll(ide) synthesis in etioplast membrane preparations 623–635
GUARNIERI, C. *see* CALDARERA, C. M. 91–98
GUTOWSKI, S. J. & ROSENBERG, H. Succinate uptake and related proton movements in *Escherichia coli* K12 647–654

HADDOCK, B. A. & KENDALL-TOBIAS, M. W. Functional anaerobic electron transport linked to the reduction of nitrate and fumarate in membranes from *Escherichia coli* as demonstrated by quenching of atebrin fluorescence 655–659
HADDOCK, B. A. *see also* GARLAND, P. B. 547–559; POOLE, R. K. 537–546
HANSMA, H. G. & KUNG, C. Studies of the cell surface of *Paramecium*. Ciliary membrane proteins and immobilization antigens 523–528
HARPER, R. D. & SAGGERSON, E. D. Some aspects of fatty acid oxidation in isolated fat-cell mitochondria from rat 485–494
HARRIS, E. D., Jr. *see* MCCROSKERY, P. A. 131–142
HARRIS, R. C. *see* SAHLIN, K. 173–180
HARWOOD, R., GRANT, M. E. & JACKSON, D. S. Studies on the glycosylation of hydroxylysine residues during collagen biosynthesis and the subcellular localization of collagen galactosyltransferase and collagen glucosyltransferase in tendon and cartilage cells 291–302
HAVERBERG, L. N., DECKELBAUM, L., BILMAZES, C., MUNRO, H. N. & YOUNG, V. R. Myofibrillar protein turnover and urinary N^{τ}-methylhistidine output response to dietary supply of protein and energy 503–510
HEATH, D. F. & CUNNINGHAM, V. J. The calculation of errors and the choice of sampling times in the determination of irreversible disposal rates *in vivo* by isotope experiments 417–420
HEATON, F. W. *see* GEORGE, G. A. 609–615
HEDESKOV, C. J. & CAPITO, K. The pentose cycle and insulin release in isolated mouse pancreatic islets during starvation 571–576
HEMMING, F. W. *see* OLIVER, G. J. A. 191–199
HEMS, D. A. *see* MA, G. Y. 389–392
HERS, H.-G. *see* HUE, L. 105–114
HILDERSON, H. J. J., DE WOLF, M. J. S., LAGROU, A. R. & DIERICK, W. S. H. Subcellular structure of bovine thyroid gland. A study on bovine thyroid membranes by buoyant-density-gradient centrifugation in a B-XIV zonal rotor 601–607
HINTON, R. H. *see* MULLOCK, B. M. 51–56
HOLDSWORTH, E. S., JORDAN, J. E. & KEENAN, E. Effects of cholecalciferol on the translocation of calcium by non-everted chick ileum *in vitro* 181–190
HOLLIMAN, A. *see* CHAVIN, S. I. 267–270
HUE, L., BONTEMPS, F. & HERS, H.-G. The effect of glucose and of potassium ions on the interconversion of the two forms of glycogen phosphorylase and of glycogen synthetase in isolated rat liver preparations 105–114
HULTMAN, E. *see* SAHLIN, K. 173–180
HUMPHREY, T. J. *see* BOUDET, A. 409–416

IOANNOU, P. *see* WYNTER, C. V. A. 449–467

JACKSON, D. S. *see* HARWOOD, R. 291–302
JOHNSON, P., COOK, I. F., REES, H. H. & GOODWIN, T. W. Mode of formation of cholesta-5,7-dien-3β-ol from cholest-5-en-3β-ol by larvae of *Calliphora erythrocephala* 303–311
JONES, C. J. *see* MOWBRAY, J. 583–592
JORDAN, J. E. *see* HOLDSWORTH, E. S. 181–190
JUDAH, J. D. *see* DORLING, P. R. 341–348

KAKO, K. J. & PATTERSON, S. D. Phosphatidate phosphohydrolase and palmitoyl-coenzyme A hydrolase in cardiac subcellular fractions of hyperthyroid rabbits and cardiomyopathic hamsters 313–323
KATYARE, S. S. *see* RAJWADE, M. S. 379–387
KEENAN, E. *see* HOLDSWORTH, E. S. 181–190
KENDALL-TOBIAS, M. W. *see* HADDOCK, B. A. 655–659
KERSTEN, W. *see* OGILVIE, A. 511–515, 517–522
KNIGHT, B. L. Adenosine 3′:5′-cyclic monophosphate-dependent protein kinase in brown fat from newborn rabbits. Changes in the binding of adenosine 3′:5′-cyclic monophosphate after preincubation of the tissue with noradrenaline or incubation of the enzyme with adenosine triphosphate 577–582
KOIVULA, T. *see* ERIKSSON, C. J. P. 709–712
KONINKX, J. F. J. G. Induced transcription-dependent synthesis of mitochondrial reduced nicotinamide–adenine dinucleotide dehydrogenase in *Drosophila* 17–22
KREBS, H. A. *see* LUND, P. 593–599
KUHN, N. J. & WHITE, A. Milk glucose as an index of the intracellular glucose concentration of rat mammary gland 153–155
KUHN, N. J. *see also* RODWAY, R. G. 433–443, 445–448
KUNG, C. *see* HANSMA, H. G. 523–528

LABADIE, J. H., CHAPMAN, K. P. & ARONSON, N. N., Jr. Glycoprotein catabolism in rat liver. Lysosomal digestion of iodinated asialo-fetuin 271–279

LAGROU, A. R. *see* HILDERSON, H. J. J. 601–607
LAUTER, C. J. *see* TRAMS, E. G. 681–687
LEADER, D. P. Enzymic iodination of eukaryotic ribosomal subunits. Characterization and analysis by two-dimensional gel electrophoresis 373–378
LEWIS, B. A., ELKIN, A., MICHELL, R. H. & COLEMAN, R. Basolateral plasma membranes of intestinal epithelial cells. Identification by lactoperoxidase-catalysed iodination and isolation after density perturbation with digitonin 71–84
LIU, S.-L. H., MCNAMARA, D. J. & WEBB, T. E. The dexamethasone receptor in the Novikoff hepatoma. Characterization and changes in concentration and nuclear uptake during glucocorticoid therapy 689–695
LLOYD-DAVIES, K. A. & BRINDLEY, D. N. Palmitate activation and esterification in microsomal fractions of rat liver 39–49
LOTLIKAR, P. D., BALDY, W. J. & DWYER, E. N. Dimethylnitrosamine demethylation by reconstituted liver microsomal cytochrome *P*-450 enzyme system 705–708
LUND, P., CORNELL, N. W. & KREBS, H. A. Effect of adenosine on the adenine nucleotide content and metabolism of hepatocytes 593–599

MA, G. Y. & HEMS, D. A. Inhibition of fatty acid synthesis and stimulation of glycogen breakdown by vasopressin in the perfused mouse liver 389–392
MAINWARING, W. I. P. *see* RENNIE, P. S. 1–16
MARASA, J. C. *see* VOLPE, J. J. 701–703
MARCHETTI, M. *see* BARBIROLI, B. 229–232
MARRIOTT, K. M. & NORTHCOTE, D. H. The induction of enzyme activity in the endosperm of germinating castor-bean seeds 65–70
MARSELOS, M. *see* ERIKSSON, C. J. P. 709–712
MARTIN, B. R., CLAUSEN, T. & GLIEMANN, J. Relationships between the exchange of calcium and phosphate in isolated fat-cells 121–129
MATHIAS, A. P. *see* WYNTER, C. V. A. 449–467
MATWIYOFF, N. A. *see* EAKIN, R. T. 529–535
MCCROSKERY, P. A., RICHARDS, J. F. & HARRIS, E. D., Jr. Purification and characterization of a collagenase extracted from rabbit tumours 131–142
MCDONALD, A. *see* CRYER, A. 717–720
MCNAMARA, D. J. *see* LIU, S.-L. H. 689–695
MICHELL, R. H. *see* LEWIS, B. A. 71–84
MORGAN, L. O. *see* EAKIN, R. T. 529–535
MØRKRID, L. *see* ANDERSEN, K.-J. 157–159
MORUZZI, G. *see* CALDARERA, C. M. 91–98
MOWBRAY, J., DAVIES, J. A., BATES, D. J. & JONES, C. J. Growth hormone, cyclic nucleotides and the rapid control of translation in heart muscle 583–592
MULLOCK, B. M. & HINTON, R. H. Determination of the amount of small messenger ribonucleic acid-containing particles free in liver cytoplasm 51–56
MUNRO, H. N. *see* HAVERBERG, L. N. 503–510
MURTY, C. N., VERNEY, E. & SIDRANSKY, H. Initiation factors in protein synthesis by free and membrane-bound polyribosomes of liver and hepatoma 143–151

NEWSHOLME, E. A. *see* BEIS, I. 23–32
NORTHCOTE, D. H. *see* MARRIOTT, K. M. 65–70

O'BRIEN, J. A. & STRANGE, R. C. The release of adenosine 3′:5′-cyclic monophosphate from the isolated perfused rat heart 429–432
OGILVIE, A., WIEBAUER, K. & KERSTEN, W. Inhibition of leucyl-transfer ribonucleic acid synthetase in *Bacillus subtilis* by granaticin 511–515
OGILVIE, A., WIEBAUER, K. & KERSTEN, W. Stringent control of ribonucleic acid synthesis in *Bacillus subtilis* treated with granaticin 517–522
OLIVER, G. J. A. & HEMMING, F. W. The transfer of mannose to dolichol diphosphate oligosaccharides in pig liver endoplasmic reticulum 191–199

PALMER, J. M. *see* SOTTHIBANDHU, R. 637–645
PATTERSON, S. D. *see* KAKO, K. J. 313–323
PINDAR, D. F. & BUCKE, C. The biosynthesis of alginic acid by *Azotobacter vinelandii* 617–622
POGSON, C. I. & SMITH, S. A. The activity of phosphoenolpyruvate carboxykinase in rat tissues. Assay techniques and effects of dietary and hormonal changes 401–408
POOLE, R. K. & HADDOCK, B. A. Effects of sulphate-limited growth in continuous culture on the electron-transport chain and energy conservation in *Escherichia coli* K12 537–546

QUINN, P. S. *see* DORLING, P. R. 341–348
QUIRINO, A. *see* AURICCHIO, F. 211–216

RAJWADE, M. S., KATYARE, S. S., FATTERPAKER, P. & SREENIVASAN, A. Regulation of mitochondrial protein turnover by thyroid hormone(s) 379–387
REES, H. H. *see* JOHNSON, P. 303–311
REIJNIERSE, G. L. A., VELDSTRA, H. & VAN DEN BERG, C. J. Short-chain fatty acid synthases in brain. Subcellular localization and changes during development 477–484
REIJNIERSE, G. L. A., VELDSTRA, H. & VAN DEN BERG, C. J. Subcellular localization of γ-aminobutyrate transaminase and glutamate dehydrogenase in adult rat brain. Evidence for at least two small glutamate compartments in brain 469–475
RENNIE, P. S., SYMES, E. K. & MAINWARING, W. I. P. The androgenic regulation of the activities of enzymes engaged in the synthesis of deoxyribonucleic acid in rat ventral prostate gland 1–16
RICHARDS, J. F. *see* MCCROSKERY, P. A. 131–142
ROBINSON, D. S. *see* CRYER, A. 717–720
RODWAY, R. G. & KUHN, N. J. Hormonal control of luteal 20α-hydroxy steroid dehydrogenase and Δ^5-3β-hydroxy steroid dehydrogenase during luteolysis in the pregnant rat 433–443
RODWAY, R. G. & KUHN, N. J. Luteal 20α-hydroxy steroid dehydrogenase and the formation of Δ^4-3-oxo steroids in the rat after weaning or treatment with 2-bromo-α-ergocryptine during lactation 445–448
ROGUET, R. & BOURRILLON, R. Changes in lectin-induced deoxyribonucleic acid synthesis in cultures of chick-embryo fibroblasts at various stages of development 421–423
ROSENBERG, H. *see* GUTOWSKI, S. J. 647–654
ROTONDI, A. *see* AURICCHIO, F. 211–216
ROUGHAN, P. G. *see* SLACK, C. R. 217–228
ROWLEY, D. L. *see* ARINZE, I. J. 393–399
ROWSELL, E. V. *see* ROWSELL, K. V. 357–363
ROWSELL, K. V., ALI, T. A. J. & ROWSELL, E. V. A difference in the incorporation of ^{14}C into hippurate glycine from DL-[2-^{14}C]glutamate and DL-[5-^{14}C]-glutamate in guinea pigs 357–363

SAGGERSON, E. D. *see* HARPER, R. D. 485–494
SAHLIN, K., HARRIS, R. C. & HULTMAN, E. Creatine kinase equilibrium and lactate content compared with muscle pH in tissue samples obtained after isometric exercise 173–180
SATRIANO, R. *see* AURICCHIO, F. 211–216
SCHJØNSBY, H. *see* ANDERSON, K.-J. 157–159
SEILER, N. & EICHENTOPF, B. 4-Aminobutyrate in mammalian putrescine catabolism 201–210
SELWYN, M. J. *see* DAWSON, A. P. 333–339
SHORT, V. J., DILS, R. & BRINDLEY, D. N. Enzymes of glycerolipid synthesis in small-intestinal mucosa of foetal and neonatal guinea pigs 675–679
SIDRANSKY, H. *see* MURTY, C. N. 143–151
SLACK, C. R. & ROUGHAN, P. G. The kinetics of incorporation *in vivo* of [^{14}C]acetate and [^{14}C]carbon dioxide into the fatty acids of glycerolipids in developing leaves 217–228
SMITH, S. A. *see* POGSON, C. I. 401–408
SNOSWELL, A. M. *see* COSTA, N. D. 161–166, 167–172
SOTTHIBANDHU, R. & PALMER, J. M. The activation of non-phosphorylating electron transport by adenine nucleotides in Jerusalem-artichoke (*Helianthus tuberosus*) mitochondria 637–645
SREENIVASAN, A. *see* RAJWADE, M. S. 379–387
STRANGE, R. C. *see* O'BRIEN, J. A. 429–432
SUNDARESAN, G. M. *see* SUNDARESAN, P. R. 99–104
SUNDARESAN, P. R. & SUNDARESAN, G. M. Tissue distribution of retinol and its metabolites after administration of double-labelled retinol 99–104
SYMES, E. K. *see* RENNIE, P. S. 1–16

TOLOMELLI, B. *see* BARBIROLI, B. 229–232
TOPPING, D. L. Acute effects of carbon monoxide on the metabolism of perfused rat liver 425–427
TRAMS, E. G. & LAUTER, C. J. Adenosine deaminase of cultured brain cells 681–687

VAN DEN BERG, C. J. *see* REIJNIERSE, G. L. A. 469–475, 477–484
VANCE, D. E. *see* BROPHY, P. J. 495–501
VELDSTRA, H. *see* REIJNIERSE, G. L. A. 469–475, 477–484
VERNEY, E. *see* MURTY, C. N. 143–151
VOLPE, J. J., FUJIMOTO, K., MARASA, J. C. & AGRAWAL, H. C. Relation of C-6 glial cells in culture to myelin 701–703
VON DER LIPPE, G. *see* ANDERSEN, K.-J. 157–159

WATT, G. D. & BURNS, A. The thermochemical characterization of sodium dithionite, flavin mononucleotide, flavin–adenine dinucleotide and Methyl and Benzyl Viologens as low-potential reductants for biological systems 33–37
WATTS, R. W. E. *see* BLACKBURN, M. J. 697–700
WEBB, T. E. *see* LIU, S.-L. H. 689–695
WHITE, A. *see* KUHN, N. J. 153–155
WIDDOWSON, D. & ANTHONY, C. The microbial metabolism of C_1 compounds. The electron-transport chain of *Pseudomonas* AM1 349–356
WIEBAUER, K. *see* OGILVIE, A. 511–515, 517–522
WILKINSON, B. J., DEANS, J. A. & ELLAR, D. J. Biochemical evidence for the reversed polarity of the outer membrane of the bacterial forespore 561–569
WILLIAMS, E. R. *see* CRYER, A. 717–720
WISHART, G. J. & DUTTON, G. J. Precocious development of glucuronidating and hydroxylating enzymes in chick embryos treated with pituitary grafts 325–331
WRIGHT, P. C. *see* YOUNG, J. D. 713–715
WYNTER, C. V. A., IOANNOU, P. & MATHIAS, A. P. The effect of convulsions induced by flurothyl on ribonucleic acid synthesis in rat cerebral cortex during the recovery phase 449–467

YOUNG, J. D., ELLORY, J. C. & WRIGHT, P. C. Evidence against the participation of γ-glutamyltransferase–γ-glutamylcyclotransferase pathway in amino acid transport by rabbit erythrocytes 713–715
YOUNG, R. & BREMER, H. Analysis of enzyme induction in bacteria 243–254
YOUNG, V. R. *see* HAVERBERG, L. N. 503–510

ZIBOH, V. A. & DREIZE, M. A. Biosynthesis and hydrolysis of cholesteryl esters by rat skin subcellular fractions. Regulation by prostaglandins 281–289

Index of Subjects

Acetaldehyde, role of rat liver cytosol aldehyde dehydrogenase in the oxidation of, during the metabolism of ethanol *in vivo* (Eriksson, C. J. P., Marselos, M. & Koivula, T.) 709–712

Acetate, conversion of acetyl-coenzyme A into, by the combined action of carnitine acetyltransferase and acetylcarnitine hydrolase in rat and sheep liver (Costa, N.D. & Snoswell, A. M.) 167–172

Acetate, kinetics of the incorporation of carbon dioxide and, into the fatty acid moieties of glycerolipids in developing maize leaves *in vivo* (Slack, C. R. & Roughan, P. G.) 217–228

Acetophenone, metabolism of, and some chloroacetophenones by *Arthrobacter* sp. (Cripps, R. E.) 233–241

Acetylcarnitine, enzymic hydrolysis of, in rat, sheep and cow liver (Costa, N. D. & Snoswell, A. M.) 161–166

Acetylcarnitine hydrolase, activity of, in rat, sheep and cow liver (Costa, N. D. & Snoswell, A. M.) 161–166

Acetylcarnitine hydrolase, conversion of acetyl-coenzyme A into acetate by the combined action of carnitine acetyltransferase and, in rat and sheep liver (Costa, N. D. & Snoswell, A. M.) 167–172

Acetyl-coenzyme A, conversion of, into acetate by the combined action of carnitine acetyltransferase and acetylcarnitine hydrolase in rat and sheep liver (Costa, N. D. & Snoswell, A. M.) 167–172

Acetyl-coenzyme A hydrolase, evidence that the activity of, in rat and sheep liver is an artifact due to the combined action of carnitine acetyltransferase and acetylcarnitine hydrolase (Costa, N. D. & Snoswell, A. M.) 167–172

Acetyl-coenzyme A synthase, brain, rat, changes in the activities and subcellular localization of, and other short-chain fatty acyl-coenzyme A synthases in rat brain during development (Reijnierse, G. L. A., Veldstra, H. & Van den Berg, C. J.) 477–484

Acid hydrolases, *see* Hydrolases, acid

Adenine nucleotides, activation by, of non-phosphorylating electron transport in artichoke mitochondria (Sotthibandhu, R. & Palmer, J. M.) 637–645

Adenine nucleotides, contents of phosphagens, some glycolytic intermediates and, in resting muscles from various vertebrates and invertebrates (Beis, I. & Newsholme, E. A.) 23–32

Adenine nucleotides, effects of adenosine on the concentrations of, and on metabolism in isolated rat liver cells (Lund, P., Cornell, N. W. & Krebs, H. A.) 593–599

Adenosine 3′:5′-cyclic monophosphate, changes in the binding of, to newborn rabbit brown-fat adenosine 3′:5′-cyclic monophosphate-dependent protein kinase after preincubation of the tissue with noradrenaline or after incubation of the enzyme with adenosine triphosphate (Knight, B. L.) 577–582

Adenosine 3′:5′-cyclic monophosphate, effects of growth hormone and of the concentration ratio of guanosine 3′:5′-cyclic monophosphate and, on the rapid control of the rate of biosynthesis of protein in perfused rat heart (Mowbray, J., Davies, J. A., Bates, D. J. & Jones, C. J.) 583–592

Adenosine 3′:5′-cyclic monophosphate, release of, from isolated perfused rat heart (O'Brien, J. A. & Strange, R. C.) 429–432

Adenosine deaminase, activities of two types of, in cultured hamster, mouse and human brain cells (Trams, E. G. & Lauter, C. J.) 681–687

Adenosine, effects of, on the concentrations of adenine nucleotides and on metabolism in isolated rat liver cells (Lund, P., Cornell, N. W. & Krebs, H. A.) 593–599

Adenosine triphosphatase, sodium-plus-potassium ion-dependent, as a marker for guinea-pig small-intestine epithelial-cell basolateral plasma membranes (Lewis, B. A., Elkin, A., Michell, R. H. & Coleman, R.) 71–84

Adenosine triphosphate, changes in the binding of adenosine 3′:5′-cyclic monophosphate to newborn-rabbit brown-fat adenosine 3′:5′-cyclic monophosphate-dependent protein kinase after incubation of the enzyme with (Knight, B. L.) 577–582

Adipocytes, epididymal, rat, isolated, inhibition by colchicine of the heparin-stimulated release of clearing-factor lipase from (Cryer, A., McDonald, A., Williams, E. R. & Robinson, D. S.) 717–720

Adipocytes, epididymal, rat, isolated, relationships between the exchange of calcium ions and inorganic phosphate in (Martin, B. R., Clausen, T. & Gliemann, J.) 121–129

Adipocytes, epididymal, rat, oxidation of fatty acids in mitochondria isolated from (Harper, R. D. & Saggerson, E. D.) 485–494

Adipose tissue, brown, rabbit, newborn, changes in the binding of adenosine 3′:5′-cyclic monophosphate to adenosine 3′:5′-cyclic monophosphate-dependent protein kinase after preincubation of the tissue with noradrenaline or after incubation of the enzyme with adenosine triphosphate (Knight, B. L.) 577–582

Adipose tissue, epididymal, rat, effects of diet and of hormones on the activities of phosphoenolpyruvate carboxykinase (guanosine triphosphate) in, and other tissues (Pogson, C. I. & Smith, S. A.) 401–408

Adipose tissue, epididymal, rat, oxidation of fatty acids in mitochondria isolated from (Harper, R. D. & Saggerson, E. D.) 485–494

Adipose tissue, epididymal, rat, relationships between the exchange of calcium ions and inorganic phosphate in fat-cells isolated from (Martin, B. R., Clausen, T. & Gliemann, J.) 121–129

Adrenal gland, rat, distribution of retinol and its metabolites in, and other tissues after the administration of [6,7-$^{14}C_2$,11,12-$^{3}H_2$]retinol to vitamin A-deficient animals (Sundaresan, P. R. & Sundaresan, G. M.) 99–104

Age, influence of, on the response of the activities of alkaline phosphatases in immature mouse ovary to treatment with gonadotrophins (Bramley, T. A.) 365–372

Alanine, evidence against the participation of the γ-glutamyltransferase–γ-glutamylcyclotransferase pathway in the transport of, and other amino acids by rabbit erythrocytes (Young, J. D., Ellory, J. C. & Wright, P. C.) 713–715

Albumin, serum, rat, effects of colchicine on the biosynthesis and secretion of, by rat liver (Dorling, P. R., Quinn, P. S. & Judah, J. D.) 341–348

Aldehyde dehydrogenase, cytosol, liver rat, role of, in the oxidation of acetaldehyde during the metabolism of ethanol *in vivo* (Eriksson, C. J. P., Marselos, M. & Koivula, T.) 709–712

Alginate, biosynthesis of, by *Azotobacter vinelandii* N.C.I.B. 9068 (Pindar, D. F. & Bucke, C.) 617–622

Alkaline phosphatase, *see* Phosphatase, alkaline

Alloxan-diabetes, *see* Diabetes, alloxan-

Amino acids, evidence against the participation of the γ-glutamyltransferase–γ-glutamylcyclotransferase pathway in the transport of, by rabbit erythrocytes (Young, J. D., Ellory, J. C. & Wright, P. C.) 713–715

4-Aminobutyrate aminotransferase, brain, rat, adult, subcellular localization of, and glutamate dehydrogenase and evidence for at least two small glutamate compartments (Reijnierse, G. L. A., Veldstra, H. & Van Den Berg, C. J.) 469–475

4-Aminobutyrate aminotransferase, effects of inhibitors of diamine oxidase, monoamine oxidase and, on the catabolism of putrescine in mouse brain and liver (Seiler, N. & Eichentopf, B.) 201–210

4-Aminobutyrate, formation of, during the catabolism of putrescine in mouse brain and liver (Seiler, N. & Eichentopf, B.) 201–210

Androgens, regulation by, of the activities of enzymes engaged in the biosynthesis of deoxyribonucleic acid in rat ventral prostate gland (Rennie, P. S., Symes, E. K. & Mainwaring, W. I. P.) 1–16

Aniline hydroxylase, precocious development of uridine diphosphate glucuronyltransferase and, in chick embryo treated with a pituitary-gland graft (Wishart, G. J. & Dutton, G. J.) 325–331

Anoxia, effect of, on the release of adenosine 3′:5′-cyclic monophosphate from isolated perfused rat heart (O'Brien, J. A. & Strange, R. C.) 429–432

Anti-diuretic hormone, inhibition of the biosynthesis of fatty acids and stimulation of the breakdown of glycogen by, in perfused mouse liver (Ma, G. Y. & Hems, D. A.) 389–392

Antigen, immobilization, characterization of the major ciliary membrane protein of *Paramecium aurelia* and its relationship to (Hansma, H. G. & Kung, C.) 523–528

Arginine phosphate, contents of adenine nucleotides, some glycolytic intermediates and, in resting muscles of various invertebrates (Beis, I. & Newsholme, E. A.) 23–32

Arthrobacter sp., metabolism of acetophenone and some chloroacetophenones by (Cripps, R. E.) 233–241

Artichoke (*Helianthus tuberosus*), activation by adenine nucleotides of non-phosphorylating electron transport in mitochondria from (Sotthibandhu, R. & Palmer, J. M.) 637–645

Ascites-cell carcinoma, V_2, purification and characterization of collagenase extracted from, growing in rabbit skeletal muscle (McCroskery, P. A., Richards, J. F. & Harris, E. D., Jr.) 131–142

Asialo-fetuin, iodinated, digestion of, by rat liver lysosomes (LaBadie, J. H., Chapman, K. P. & Aronson, N. N., Jr.) 271–279

Atebrin, linkage of functional anaerobic electron transport to the reduction of nitrate or fumarate in *Escherichia coli* membranes as demonstrated by quenching of the fluorescence of (Haddock, B. A. & Kendall-Tobias, M. W.) 655–659

Azotobacter vinelandii N.C.I.B. 9068, biosynthesis of alginate by (Pindar, D. F. & Bucke, C.) 617–622

Bacillus megaterium KM, biochemical evidence for the reversed polarity of the outer membrane of the forespore of (Wilkinson, B. J., Deans, J. A. & Ellar, D. J.) 561–569

Bacillus subtilis 168, cytochemical studies on the production of alkaline phosphatase during sporulation in (Glenn, A. R. & Coote, J. G.) 85–89

Bacillus subtilis, inhibition by granaticin of the activity of leucyl-transfer ribonucleic acid synthetase in (Ogilvie, A., Wiebauer, K. & Kersten, W.) 511–515

Bacillus subtilis, stringent control of the biosynthesis of ribonucleic acid, in, treated with granaticin (Ogilvie, A., Wiebauer, K. & Kersten, W.) 517–522

Barley (*Hordeum vulgare*) seedlings, etiolated, characterization of the terminal stages of the biosynthesis of chlorophyll(ide) in preparations of etioplast membranes isolated from, and maize (*Zea mays*) shoots (Griffiths, W. T.) 623–635

Bean, castor (*Ricinus communis*), induction of enzyme activities in the endosperm of germinating seeds of (Marriott, K. M. & Northcote, D. H.) 65–70

Benzyl Viologen, thermochemical characterization of sodium dithionite, flavin mononucleotide, flavin-adenine dinucleotide, Methyl Viologen and, as low-potential reductants for biological systems (Watt, G. D. & Burns, A.) 33–37

Bis-(2,2,2-trifluoroethyl) ether (flurothyl), effect of convulsions induced by, on the biosynthesis of ribonucleic acid in rat cerebral cortex during the recovery phase (Wynter, C. V. A., Ioannou, P. & Mathias, A. P.) 449–467

Blood, calculation of errors and the choice of sampling times in the determination of rates of irreversible disposal of substrates in, *in vivo* in experiments with isotopically labelled compounds (Heath, D. F & Cunningham, V. J.) 417–420

Blood, rat, distribution of retinol and its metabolites in, and other tissues after the administration of [6,7-$^{14}C_2$,-11,12-$^3H_2$]retinol to vitamin A-deficient animals (Sundaresan, P. R. & Sundaresan, G. M.) 99–104

Blowfly (*Calliphora erythrocephala*) larvae, mode of formation of cholesta-5,7-dien-3β-ol from cholest-5-en-3β-ol by (Johnson, P., Cook, I. F., Rees, H. H. & Goodwin, T. W.) 303–311

Brain cells, hamster, mouse and human, cultured, activities of two types of adenosine deaminase in (Trams, E. G. & Lauter, C. J.) 681–687

Brain cortex, rat, effect of convulsions induced by flurothyl on the biosynthesis of ribonucleic acid in, during the recovery phase (Wynter, C. V. A., Ioannou, P. & Mathias, A. P.) 449–467

Brain, mouse, formation of 4-aminobutyrate during the catabolism of putrescine in, and liver (Seiler, N. & Eichentopf, B.) 201–210

Brain, rat, adult, subcellular localization of 4-aminobutyrate aminotransferase and glutamate dehydrogenase in, and evidence for at least two small glutamate compartments (Reijnierse, G. L. A., Veldstra, H. &. Van Den Berg, C. J.) 469–475

Brain, rat, changes in the activities and subcellular localization of short-chain fatty acyl-coenzyme A synthases in, during development (Reijnierse, G. L. A., Veldstra, H. & Van Den Berg, C. J.) 477–484
Brain, rat, elongation of fatty acids by microsomal fractions from, during development (Brophy, P. J. & Vance, D. E.) 495–501
Brain, rat, regulation by thyroid hormone(s) of the turnover of mitochondrial proteins in, and liver and kidney (Rajwade, M. S., Katyare, S. S., Fatterpaker, P. & Sreenivasan, A.) 379–387
2-Bromo-α-ergocryptine, activity of luteal 20α-hydroxy steroid dehydrogenase and the formation of Δ^4-3-oxo steroids in the rat after weaning or treatment with, during lactation (Rodway, R. G. & Kuhn, N. J.) 445–448
Brush border, small-intestine, guinea-pig, differentiation between the plasma membranes of, and the basolateral plasma membranes (Lewis, B. A., Elkin, A., Michell, R. H. & Coleman, R.) 71–84
Brush borders, small-intestine, guinea-pig, purification and characterization of (Andersen, K.-J., von der Lippe, G., Mørkrid, L. & Schjønsby, H.) 157–159

Calcium ions, effects of cholecalciferol on the translocation of, by a non-everted segment of chick ileum *in vitro* (Holdsworth, E. S., Jordan, J. E. & Keenan, E.) 181–190
Calcium ions, relationships between the exchange of inorganic phosphate and, in isolated rat epididymal fat-cells (Martin, B. R., Clausen, T. & Gliemann, J.) 121–129
Calcium ions, use of the calcium ion-activated luminescent protein obelin in a study of the permeability to, of pigeon erythrocyte 'ghosts' (Campbell, A. K. & Dormer, R. L.) 255–265
Calliphora erythrocephala, *see* Blowfly
Carbon dioxide, kinetics of the incorporation of acetate and, into the fatty acid moieties of glycerolipids in developing maize leaves *in vivo* (Slack, C. R. & Roughan, P. G.)217–228
Carbon isotope (^{14}C), difference in the incorporation of, from DL-[2-^{14}C]glutamate and DL-[5-^{14}C]glutamate into the glycine moiety of hippurate in the guinea pig (Rowsell, K. V., Ali, T. A. J. & Rowsell, E. V.) 357–363
Carbon isotope (^{13}C) nuclear-magnetic-resonance spectroscopy of whole cells and of cytochrome *c* from *Neurospora crassa* grown with [*Me*-^{13}C]methionine (Eakin, R. T., Morgan, L. O. & Matwiyoff, N. A.) 529–535
Carbon monoxide, acute effects of, on metabolism in perfused rat liver (Topping, D. L.) 425–427
Carcinoma, V_2 ascites-cell, purification and characterization of collagenase extracted from, growing in rabbit skeletal muscle (McCroskery, P. A., Richards, J. F. & Harris, E. D., Jr.) 131–142
Cardiomyopathy, hereditary, activities of phosphatidate phosphohydrolase and palmitoyl-coenzyme A hydrolase in subcellular fractions of heart from hyperthyroid rabbits and from hamsters with (Kako, K. J. & Patterson, S. D.) 313–323
Carnitine acetyltransferase, conversion of acetyl-coenzyme A into acetate by the combined action of, and acetylcarnitine hydrolase in rat and sheep liver (Costa, N. D. & Snoswell, A. M.) 167–172
Carnitine, recycling of, in rat, sheep and cow liver (Costa, N. D. & Snoswell, A. M.) 161–166
Cartilage cells, chick-embryo, glycosylation of hydroxylysine residues during the biosynthesis of collagen and the subcellular localization of collagen galactosyltransferase and collagen glucosyltransferase in, and tendon cells (Harwood, R., Grant, M. E. & Jackson, D. S.) 291–302
Castor bean, *see* Bean, castor
Cells, brain, hamster, mouse and human, cultured, activities of two types of adenosine deaminase in (Trams, E. G. & Lauter, C. J.) 681–687
Cells, fat-, epididymal, rat, isolated, relationships between the exchange of calcium ions and inorganic phosphate in (Martin, B. R., Clausen, T. & Gliemann, J.) 121–129
Cells, glial, C-6, rat, cultured, presence in of 2′:3′-cyclic nucleotide 3′-phosphohydrolase and other proteins characteristic of myelin (Volpe, J. J., Fujimoto, K., Marassa, J. C. & Agrawal, H. C.) 701–703
Cells, liver, guinea-pig, isolated, gluconeogenesis by (Arinze, I. J. & Rowley, D. L.) 393–399
Cells, liver, rat, isolated, effects of adenosine on the concentrations of adenine nucleotides and on metabolism in (Lund, P., Cornell, N. W. & Krebs, H. A.) 593–599
Cells, liver, rat, isolated, effects of glucose and of potassium ions on the interconversion of the two forms of glycogen phosphorylase and of glycogen synthetase in, and perfused liver (Hue, L., Bontemps, F. & Hers, H.-G.) 105–114
Cells, *Neurospora crassa*, ^{13}C nuclear-magnetic-resonance spectroscopy of, grown in the presence of [*Me*-^{13}C]-methionine (Eakin, R. T., Morgan, L. O. & Matwiyoff, N. A.) 529–535
Cerebral cortex, rat, effect of convulsions induced by flurothyl on the biosynthesis of ribonucleic acid in, during the recovery phase (Wynter, C. V. A., Ioannou, P. & Mathias, A. P.) 449–467
Chick, effects of cholecalciferol on the translocation of calcium ions by a non-everted segment of ileum from, *in vitro* (Holdsworth, E. S., Jordan, J. E. & Keenan, E.) 181–190
Chick-embryo fibroblasts, cultured, changes in the biosynthesis of deoxyribonucleic acid induced by lectins in, at various stages of development (Roguet, R. & Bourrillon, R.) 421–423
Chick embryo, glycosylation of hydroxylysine residues during the biosynthesis of collagen and the subcellular localization of collagen galactosyltransferase and collagen glucosyltransferase in tendon and cartilage cells from (Harwood, R., Grant, M. E. & Jackson, D. S.) 291–302
Chick embryo, precocious development of glucuronidating and hydroxylating enzymes in liver and kidney of, treated with a pituitary-gland graft (Wishart, G. J. & Dutton, G. J.) 325–331
Chloride ions, dependence on, of the restoration by oligomycin of the coupling of oxidative phosphorylation in rat liver mitochondria (Ariel, N. & Avi-Dor, Y.) 115–119
Chloroacetophenones, metabolism of acetophonone and, by *Arthrobacter* sp. (Cripps, R. E.) 233–241

Chlorophyll(ide), characterization of the terminal stages of the biosynthesis of, in preparations of barley and maize etioplast membranes (Griffiths, W. T.) 623–635
Cholecalciferol, effects of, on the translocation of calcium ions by a non-everted segment of chick ileum *in vitro* (Holdsworth, E. S., Jordan, J. E. & Keenan, E.) 181–190
Cholest-5-en-3β-ol, mode of formation of cholesta-5,7-dien-3β-ol from, by blowfly larvae (Johnson, P., Cook, I. F., Rees, H. H. & Goodwin, T. W.) 303–311
Cholesta-5,7-dien-3β-ol, mode of formation of, from cholest-5-en-3β-ol by blowfly larvae (Johnson, P., Cook, I. F., Rees, H. H. & Goodwin, T. W.) 303–311
Cholesterol, distribution of, throughout ox thyroid-gland membranes (Hilderson, H. J. J., De Wolf, M. J. S., Lagrou, A. R. & Dierick, W. S. H.) 601–607
Cholesteryl esters, regulation by prostaglandins of the biosynthesis and hydrolysis of, by subcellular fractions of rat skin (Ziboh, V. A.& Dreize, M. A.) 281–289
Chondroitin sulphate, inhibition by, and other glycosaminoglycans of the activities of human polymorphonuclear-leucocyte lysosomal enzymes *in vitro* (Avila, J. L. & Convit, J.) 57–64
Cilia, *Paramecium aurelia*, characterization of and relationship between the major membrane protein and the immobilization antigen of (Hansma, H. G. & Kung, C.) 523–528
Clearing-factor lipase, *see* Lipase, clearing-factor
Colchicine, effects of, on the biosynthesis and secretion of serum albumin by rat liver (Dorling, P. R., Quinn, P. S. & Judah, J. D.) 341–348
Colchicine, inhibition by, of the heparin-stimulated release of clearing-factor lipase from isolated rat epididymal fat-cells (Cryer, A., McDonald, A., Williams, E. R. & Robinson, D. S.) 717–720
Collagen galactosyltransferase, glycosylation of hydroxylysine residues during the biosynthesis of collagen and the subcellular localization of collagen glucosyltransferase and, in chick-embryo tendon and cartilage cells (Harwood, R., Grant, M. E. & Jackson, D. S.) 291–302
Collagen glucosyltransferase, glycosylation of hydroxylysine residues during the biosynthesis of collagen and the subcellular localization of collagen galactosyltransferase and, in chick-embryo tendon and cartilage cells (Harwood, R., Grant, M. E. & Jackson, D. S.) 291–302
Collagen, glycosylation of hydroxylysine residues during the biosynthesis of, and the subcellular localization of collagen galactosyltransferase and collagen glucosyltransferase in chick-embryo tendon and cartilage cells (Harwood, R., Grant, M. E. & Jackson, D. S.) 291–302
Collagenase, purification and characterization of, extracted from V_2 ascites-cell carcinoma growing in rabbit skeletal muscle (McCroskery, P. A., Richards, J. F. & Harris, E. D., Jr.) 131–142
Concanavalin A, changes in the biosynthesis of deoxyribonucleic acid induced by, in cultured chick-embryo fibroblasts at various stages of development (Roguet, R. & Bourrillon, R.) 421–423
Convulsions, flurothyl-induced, effect of, on the biosynthesis of ribonucleic acid in rat cerebral cortex during the recovery phase (Wynter, C. V. A., Ioannou, P. & Mathias, A. P.) 449–467
Corpus luteum, rat, activity of 20α-hydroxy steroid dehydrogenase in, and the formation of Δ^4-3-oxo steroids after weaning or treatment of the animal with 2-bromo-α-ergocryptine during lactation (Rodway, R. G. & Kuhn, N. J.) 445–448
Corpus luteum, rat, hormonal control of the activities of 20α-hydroxy steroid dehydrogenase and Δ^5-3β-hydroxy steroid dehydrogenase in, during luteolysis during pregnancy (Rodway, R. G. & Kuhn, N. J.) 433–443
Cortisol, changes in the concentration of the dexamethasone-binding protein and in the nuclear uptake of dexamethasone of rat Novikoff hepatoma during therapy with (Liu, S.-L. H., McNamara, D. J. & Webb, T. E.) 689–695
Creatine kinase, concentration of lactate and equilibrium of the reaction catalysed by, in relation to the pH in tissue samples of human skeletal muscle obtained after isometric exercise (Sahlin, K., Harris, R. C. & Hultman E.) 173–180
Creatine phosphate, contents of adenine nucleotides, some glycolytic intermediates and, in resting muscles of various vertebrates (Beis, I. & Newsholme, E. A.), 23–32
Cyclic adenosine 3′:5′-monophosphate, *see* Adenosine 3′:5′-cyclic monophosphate
Cyclic guanosine 3′:5′-monophosphate, *see* Guanosine 3′:5′-cyclic monophosphate
2′:3′-Cyclic nucleotide 3′-phosphohydrolase, presence in cultured rat C-6 glial cells of, and other proteins characteristic of myelin (Volpe, J. J., Fujimoto, K., Marasa, J. C. & Agrawal, H. C.) 701–703
Cyclic nucleotides, *see* Nucleotides, cyclic
Cytochrome *P*-450, demethylation of dimethylnitrosamine by reconstituted enzyme systems containing, from rat and hamster liver microsomal fractions (Lotlikar, P. D., Baldy, W. J. & Dwyer, E. N.) 705–708
Cytochrome *b*, reduction of, in artichoke mitochondria in the presence of adenine nucleotides (Sotthibandhu, R. & Palmer, J. M.) 637–645
Cytochrome *c*, *Neurospora crassa*, ^{13}C nuclear-magnetic-resonance spectroscopy of, from cells grown in the presence of [*Me*-^{13}C]methionine (Eakin, R. T., Morgan, L. O. & Matwiyoff, N. A.) 529–535
Cytochromes, effects of sulphate-limited growth in continuous culture on the content of, in *Escherichia coli* K12 (Poole, R. K. & Haddock, B. A.) 537–546
Cytochromes, role of, in the electron-transport chain of *Pseudomonas* AM1 (Widdowson, D. & Anthony, C.) 349–356
Cytoplasm, liver, rat, determination of the amount of small messenger-ribonucleic acid-containing particles free in (Mullock, B. M. & Hinton, R. H.) 51–56
Cytosol, liver, rat, role of the aldehyde dehydrogenase of, in the oxidation of acetaldehyde during the metabolism of ethanol *in vivo* (Eriksson, C. J. P., Marselos, M. & Koivula, T.) 709–712

Deoxyribonucleic acid, changes in the biosynthesis of, induced by lectins in cultured chick-embryo fibroblasts at various stages of development (Roguet, R. & Bourrillon, R.) 421–423

Deoxyribonucleic acid ligase, regulation by androgens of the activities of, and other enzymes engaged in the biosynthesis of deoxyribonucleic acid in rat ventral prostate gland (Rennie, P. S., Symes, E. K. & Mainwaring, W. I. P.) 1–16
Deoxyribonucleic acid, mitochondrial, regulation by thyroid hormone(s) of the turnover of, and proteins in rat liver, kidney and brain (Rajwade, M. S., Katyare, S. S., Fatterpaker, P. & Sreenivasan, A.) 379–387
Deoxyribonucleic acid polymerase, regulation by androgens of the activities of, and other enzymes engaged in the biosynthesis of deoxyribonucleic acid in rat ventral prostate gland (Rennie, P. S., Symes, E. K. & Mainwaring, W. I. P.) 1–16
Deoxyribonucleic acid, regulation by androgens of the activities of enzymes engaged in the biosynthesis of, in rat ventral prostate gland (Rennie, P. S., Symes, E. K. & Mainwaring, W. I. P.) 1–16
Deuterium isotope (^2H), measurement of the turnover of protein in duckweed by the use of density labelling with (Boudet, A., Humphrey, T. J. & Davies, D. D.) 409–416
Development, changes in the activities and subcellular localization of short-chain fatty acyl-coenzyme A synthases in rat brain during (Reijnierse, G. L. A., Veldstra, H. & Van den Berg, C. J.) 477–484
Development, changes in the biosynthesis of deoxyribonucleic acid induced by lectins in cultured chick-embryo fibroblasts at various stages of (Roguet, R. & Bourrillon, R.) 421–423
Development, elongation of fatty acids by rat brain microsomal fractions during (Brophy, P. J. & Vance, D. E.) 495–501
Development, neonatal, changes in the activities of enzymes involved in the biosynthesis of glycerolipids in guinea-pig small-intestinal mucosa during (Short, V. J., Dils, R. & Brindley, D. N.) 675–679
Dexamethasone-binding protein, Novikoff-hepatoma, rat, characterization and changes in the concentration of, during glucocorticoid therapy (Liu, S.-L. H., McNamara, D. J. & Webb, T. E.) 689–695
Diabetes, alloxan-, effects of, on the activities of phosphoenolpyruvate carboxykinase (guanosine triphosphate) in various rat tissues (Pogson, C. I. & Smith, S. A.) 401–408
Diamine oxidase, effects of inhibitors of 4-aminobutyrate aminotransferase, monoamine oxidase and, on the catabolism of putrescine in mouse brain and liver (Seiler, N. & Eichentopf, B.) 201–210
Dicarboxylic acids, uptake of, and related movements of protons in *Escherichia coli* K12 (Gutowski, S. J. & Rosenberg, H.) 647–654
Diet, effects of, on the activities of phosphoenolpyruvate carboxykinase (guanosine triphosphate) in various rat tissues (Pogson, C. I. & Smith, S. A.) 401–408
Diet, turnover of skeletal-muscle myofibrillar protein and the urinary excretion of N^{τ}-methylhistidine in response to the supply of protein and energy in, in the rat (Havreberg, L. N., Deckelbaum, L., Bilmazes, C., Munro, H. N. & Young, V. R.) 503–510
Dimethylnitrosamine, demethylation of, by reconstituted rat and hamster liver microsomal cytochrome *P*-450 enzyme systems (Lotlikar, P. D., Baldy, W. J. & Dwyer, E. N.) 705–708
Dithionite, sodium, thermochemical characterization of flavin mononucleotide, flavin–adenine dinucleotide, Methyl Viologen, Benzyl Viologen and, as low-potential reductants for biological systems (Watt, G. D. & Burns, A.) 33–37
Dolichol diphosphate oligosaccharides, transfer of mannose from guanosine diphosphate mannose to, by preparations of pig liver endoplasmic reticulum (Oliver, G. J. A. & Hemming, F. W.) 191–199
Drosophila hydei larva, induced transcription-dependent biosynthesis of reduced nicotinamide–adenine dinucleotide dehydrogenase in salivary-gland mitochondria from (Koninkx, J. F. J. G.) 17–22
Duckweed (*Lemna minor*), measurement of the turnover of protein in, by the use of density labelling with deuterium oxide (Boudet, A., Humphrey, T. J. & Davies, D. D.) 409–416

Ecdysones, possible role of cholesta-5,7-dien-3β-ol as an intermediate in the biosynthesis of, in blowfly larvae (Johnson, P., Cook, I. F., Rees, H. H. & Goodwin, T. W.) 303–311
Electron transport, anaerobic, functional, linkage of, to the reduction of nitrate or fumarate in *Escherichia coli* K12 membranes as demonstrated by quenching of atebrin fluorescence (Haddock, B. A. & Kendall-Tobias, M. W.) 655–659
Electron-transport chain, effects of sulphate-limited growth in continuous culture on, and energy conservation in *Escherichia coli* K12 (Poole, R. K. & Haddock, B. A.) 537–546
Electron-transport chain of *Pseudomonas* AM1 (Widdowson, D. & Anthony, C.) 349–356
Electron transport, non-phosphorylating, activation by adenine nucleotides of, in artichoke mitochondria (Sotthibandhu, R. & Palmer, J. M.) 637–645
Endoplasmic reticulum, *see* Reticulum, endoplasmic
Endosperm, castor-bean-seed, germinating, induction of enzyme activities in (Marriott, K. M. & Northcote, D. H.) 65–70
Energy coupling, action of tributyltin on, in coupling-factor-deficient submitochondrial particles from ox heart (Dawson, A. P. & Selwyn, M. J.) 333–339
Energy, effects of sulphate-limited growth in continuous culture on the electron-transport chain and the conservation of, in *Escherichia coli* K12 (Poole, R. K. & Haddock, B. A.) 537–546
Enzymes, theoretical analysis of the induction of, in bacteria (Young, R. & Bremer, H.) 243–254
Epididymis, rat, effects of diet and of hormones on the activities of phosphoenolpyruvate carboxykinase (guanosine triphosphate) in adipose tissue of, and in other tissues (Pogson, C. I. & Smith, S. A.) 401–408
Epididymis, rat, inhibition by colchicine of the heparin-stimulated release of clearing-factor lipase from fat-cells isolated from (Cryer, A., McDonald, A., Williams, E. R. & Robinson, D. S.) 717–720
Epididymis, rat, oxidation of fatty acids in fat-cell mitochondria isolated from (Harper, R. D. & Saggerson, E. D.) 485–494
Epididymis, rat, relationships between the exchange of calcium ions and inorganic phosphate in fat-cells isolated from (Martin, B. R., Clausen, T. & Gliemann, J.) 121–129

Epithelial cells, small-intestine, guinea-pig, identification of the basolateral plasma membranes of, by lactoperoxidase-catalysed iodination and their isolation after density perturbation with digitonin (Lewis, B. A., Elkin, A., Michell, R. H. & Coleman, R.) 71–84

Epithelial cells, small-intestine, guinea-pig, purification and characterization of brush borders from (Andersen, K.-J., von der Lippe, G., Mørkrid, L. & Schjønsby, H.) 157–159

Erythrocyte 'ghosts', pigeon, use of the calcium ion-activated luminescent protein obelin in a study of the permeability to calcium ions of (Campbell, A. K. & Dormer, R. L.) 255–265

Erythrocytes, rabbit, evidence against the participation of the γ-glutamyltransferase–γ-glutamylcyclotransferase pathway in the transport of amino acids by (Young, J. D., Ellory, J. C. & Wright, P. C.) 713–715

Escherichia coli K12, effects of sulphate-limited growth in continuous culture on the electron-transport chain and energy conservation in (Poole, R. K. & Haddock, B. A.) 537–546

Escherichia coli K12, linkage of functional anaerobic electron transport to the reduction of nitrate or fumarate in membranes from, as demonstrated by quenching of atebrin fluorescence (Haddock, B. A. & Kendall-Tobias, M. W.) 655–659

Escherichia coli K12, relationship between the translocation of protons and the respiratory nitrate reductase of (Garland, P. B., Downie, J. A. & Haddock, B. A.) 547–559

Escherichia coli B/r, theoretical analysis of the induction of enzymes in, and other bacteria (Young, R. & Bremer, H.) 243–254

Escherichia coli K12, uptake of succinate and related movements of protons in (Gutowski, S. J. & Rosenberg, H.) 647–654

Estradiol, *see* Oestradiol

Estrogens, *see* Oestrogens

Ethanol, role of rat liver cytosol aldehyde dehydrogenase in the oxidation of acetaldehyde during the metabolism of, *in vivo* (Eriksson, C. J. P., Marselos, M. & Koivula, T.) 709–712

Etioplasts, barley and maize, characterization of the terminal stages of the biosynthesis of chlorophyll(ide) in preparations of membranes of (Griffiths, W. T.) 623–635

Fat, brown, rabbit, newborn, changes in the binding of adenosine 3′:5′-cyclic monophosphate to adenosine 3′:5′-cyclic monophosphate-dependent protein kinase after preincubation of the tissue with noradrenaline or after incubation of the enzyme with adenosine triphosphate (Knight, B. L.) 577–582

Fat-cells, epididymal, rat, isolated, inhibition by colchicine of the heparin-stimulated release of clearing-factor lipase from (Cryer, A., McDonald, A., Williams, E. R. & Robinson, D. S.) 717–720

Fat-cells, epididymal, rat, isolated, relationships between the exchange of calcium ions and inorganic phosphate in (Martin, B. R., Clausen, T. & Gliemann, J.) 121–129

Fat-cells, epididymal, rat, oxidation of fatty acids in mitochondria isolated from (Harper, R. D. & Saggerson, E. D.) 485–494

Fatty acids, elongation of, in rat brain microsomal fractions during development (Brophy, P. J. & Vance, D. E.) 495–501

Fatty acids, glycerolipid, kinetics of the incorporation of acetate and carbon dioxide into, in developing maize leaves *in vivo* (Slack, C. R. & Roughan, P. G.) 217–228

Fatty acids, inhibition of the biosynthesis of, and stimulation of the breakdown of glycogen by vasopressin in perfused mouse liver (Ma, G. Y. & Hems, D. A.) 389–392

Fatty acids, oxidation of, in isolated rat epididymal fat-cell mitochondria (Harper, R. D. & Saggerson, E. D.) 485–494

Fatty acids, oxidation of ketone bodies and, in isolated islets of Langerhans from obese–hyperglycaemic mice (Berne, C.) 661–666

Fatty acyl (short-chain)-coenzyme A synthases, brain, rat, changes in the activities and subcellular localization of, during development (Reijnierse, G. L. A., Veldstra, H. & Van den Berg, C. J.) 477–484

Ferredoxin, spinach, thermochemical characterization of sodium dithionite, flavin mononucleotide, flavin–adenine dinucleotide, Methyl Viologen and Benzyl Viologen as low-potential reductants for, and other biological systems (Watt, G. D. & Burns, A.) 33–37

Fetuin, asialo-, iodinated, digestion of, by rat liver lysosomes (LaBadie, J. H., Chapman, K. P. & Aronson, N. N., Jr.) 271–279

Fibroblasts, chick-embryo, cultured, changes in the biosynthesis of deoxyribonucleic acid induced by lectins in, at various stages of development (Roguet, R. & Bourrillon, R.) 421–423

Flavin–adenine dinucleotide, thermochemical characterization of sodium dithionite, Methyl Viologen, Benzyl Viologen, flavin mononucleotide and, as low-potential reductants for biological systems (Watt, G. D. & Burns, A.) 33–37

Flavin mononucleotide, thermochemical characterization of sodium dithionite, Methyl Viologen, Benzyl Viologen, flavin–adenine dinucleotide and, as low-potential reductants for biological systems (Watt, G. D. & Burns, A.) 33–37

Flurothyl [bis-(2,2,2-trifluoroethyl) ether], effect of convulsions induced by, on the biosynthesis of ribonucleic acid in rat cerebral cortex during the recovery phase (Wynter, C. V. A., Ioannou, P. & Mathias, A. P.) 449–467

Folates, metabolism of, in rat liver during regeneration after partial hepatectomy (Barbiroli, B., Bovina, C., Tolomelli, B. & Marchetti, M.) 229–232

Forespore, *Bacillus megaterium* KM, biochemical evidence for the reversed polarity of the outer membrane of (Wilkinson, B. J., Deans, J. A. & Ellar, D. J.) 561–569

Fumarate, linkage of functional anaerobic electron transport to the reduction of nitrate or, in *Escherichia coli* K12 membranes as demonstrated by quenching of atebrin fluorescence (Haddock, B. A. & Kendall-Tobias, M. W.) 655–659

β-Galactosidase, theoretical analysis of the induction of, in *Escherichia coli* B/r (Young, R. & Bremer, H.) 243–254

Gene transcription, dependence on, of induced biosynthesis of reduced nicotinamide–adenine dinucleotide dehydrogenase in *Drosophila hydei*-larva salivary-gland mitochondria (Koninkx, J. F. J. G.) 17–22
Germination, induction of enzyme activities in the endosperm of castor-bean seeds during (Marriott, K. M. & Northcote, D. H.) 65–70
Gibberellic acid, induction by, of enzyme activities in the endosperm of germinating castor-bean seeds (Marriott, K. M. & Northcote, D. H.) 65–70
Glial cells, C-6, rat, cultured, presence in, of 2′:3′-cyclic nucleotide 3′-phosphohydrolase and other proteins characteristic of myelin (Volpe, J. J., Fujimoto, K., Marasa, J. C. & Agrawal, H. C.) 701–703
Glucocorticoids, changes in the concentration of the dexamethasone-binding protein and in the nuclear uptake of dexamethasone of rat Novikoff hepatoma during therapy with (Liu, S.-L. H., McNamara, D. J. & Webb, T. E.) 689–695
Gluconeogenesis by isolated guinea-pig liver cells (Arinze, I. J. & Rowley, D. L.) 393–399
Gluconeogenesis, effects of adenosine on the concentrations of adenine nucleotides and on, in isolated rat liver cells (Lund, P., Cornell, N. W. & Krebs, H. A.) 593–599
Glucose, activity of the pentose phosphate cycle for the metabolism of, in and the release of insulin by mouse islets of Langerhans isolated from starved animals (Hedeskov, C. J. & Capito, K.) 571–576
Glucose, concentration of glucose in rat milk as an index of the intracellular concentration of, in the mammary gland (Kuhn, N. J. & White, A.) 153–155
Glucose, effects of adenosine on the concentrations of adenine nucleotides and on the formation of, in isolated rat liver cells (Lund, P., Cornell, N. W. & Krebs, H. A.) 593–599
Glucose, effects of potassium ions and of, on the interconversion of the two forms of glycogen phosphorylase and of glycogen synthetase in rat liver preparations (Hue, L., Bontemps, F. & Hers, H.-G.) 105–114
Glucose, formation of, by isolated guinea-pig liver cells (Arinze, I. J. & Rowley, D. L.) 393–399
Glucose, incorporation of palmitate and, into lipids in isolated islets of Langerhans from obese–hyperglycaemic mice (Berne, C.) 667–673
Glutamate dehydrogenase, brain, rat, adult, subcellular localization of, and 4-aminobutyrate aminotransferase and evidence for at least two small glutamate compartments (Reijnierse, G. L. A., Veldstra, H. & Van Den Berg, C. J.) 469–475
DL-[5-^{14}C]Glutamate, difference in the incorporation of ^{14}C from DL-[2-^{14}C]glutamate and, into the glycine moiety of hippurate in the guinea pig (Rowsell, K. V., Ali, T. A. J. & Rowsell, E. V.) 357–363
Glutamate, subcellular localization of 4-aminobutyrate aminotransferase and glutamate dehydrogenase in adult rat brain and evidence for at least two small compartments of (Reijnierse, G. L. A., Veldstra, H. & Van Den Berg, C. J.) 469–475
γ-Glutamyltransferase–γ-glutamylcyclotransferase pathway, evidence against the participation of, in the transport of amino acids by rabbit erythrocytes (Young, J. D., Ellory, J. C. & Wright, P. C.) 713–715
Glycerol phosphate acyltransferase, relationship between the activities of palmitoyl-coenzyme A synthetase and, and the rate of biosynthesis of glycerolipids in rat liver microsomal fraction (Lloyd-Davies, K. A. & Brindley, D. N.) 39–49
Glycerolipids, activities of enzymes involved in the biosynthesis of, in the small-intestinal mucosa of foetal and neonatal guinea pigs (Short, V. J., Dils, R. & Brindley, D. N.) 675–679
Glycerolipids, kinetics of the incorporation of acetate and carbon dioxide into the fatty acid moieties of, in developing maize leaves *in vivo* (Slack, C. R. & Roughan, P. G.) 217–228
Glycerolipids, relationship between the activities of palmitoyl-coenzyme A synthetase and glycerol phosphate acyltransferase and the rate of biosynthesis of, in rat liver microsomal fraction (Lloyd-Davies, K. A. & Brindley, D. N.) 39–49
Glycine moiety, difference in the incorporation of ^{14}C from DL-[2-^{14}C]glutamate and DL-[5-^{14}C]glutamate into, of hippurate in the guinea pig (Rowsell, K. V., Ali, T. A. J. & Rowsell, E. V.) 357–363
Glycogen, inhibition of the biosynthesis of fatty acids and stimulation of the breakdown of, by vasopressin in perfused mouse liver (Ma, G. Y. & Hems D. A.) 389–392
Glycogen phosphorylase, effects of glucose and of potassium ions on the interconversion of the two forms of glycogen synthetase and of, in rat liver preparations (Hue, L., Bontemps, F. & Hers, H.-G.) 105–114
Glycogen synthetase, effects of glucose and of potassium ions on the interconversion of the two forms of glycogen phosphorylase and of, in rat liver preparations (Hue, L., Bontemps, F. & Hers, H.-G.) 105–114
Glycolysis, contents of adenine nucleotides, phosphagens and some intermediates of, in resting muscles from various vertebrates and invertebrates (Beis, I. & Newsholme, E. A.) 23–32
Glycoprotein (fetuin), asialo-, iodinated, digestion of, by rat liver lysosomes (LaBadie, J. H., Chapman, K. P. & Aronson, N. N., Jr.) 271–279
Glycosaminoglycans, inhibition by, of the activities of human polymorphonuclear-leucocyte lysosomal enzymes *in vitro* (Avila, J. L. & Convit, J.) 57–64
Gonadotrophin, chorionic, human, influence of age on the response of the activities of alkaline phosphatases in immature mouse ovary to treatment with, and other gonadotrophins (Bramley, T. A.) 365–372
Gonadotrophin, control by, and other hormones of the activities of luteal 20α-hydroxy steroid dehydrogenase and Δ^5-3β-hydroxy steroid dehydrogenase during luteolysis in the pregnant rat (Rodway, R. G. & Kuhn, N. J.) 433–443
Granaticin, inhibition by, of the activity of leucyl-transfer ribonucleic acid synthetase in *Bacillus subtilis* (Ogilvie, A., Wiebauer, K. & Kersten, W.) 511–515
Granaticin, stringent control of the biosynthesis of ribonucleic acid in *Bacillus subtilis* treated with (Ogilvie, A., Wiebauer, K. & Kersten, W.) 517–522
Granulocytes, human, investigation of the location and possible compartmentation of the precursor pool of phenylalanine for the biosynthesis of protein in (Blackburn, M. J., Andrews, T. M. & Watts, R. W. E.) 697–700

Growth hormone, effects of, and of cyclic nucleotides on the rapid control of the rate of biosynthesis of protein in perfused rat heart (Mowbray, J., Davies, J. A., Bates, D. J. & Jones, C. J.) 583–592
Guanosine 3′:5′-cyclic monophosphate, effects of growth hormone and of the concentration ratio of adenosine 3′:5′-cyclic monophosphate and, on the rapid control of the rate of biosynthesis of protein in perfused rat heart (Mowbray, J., Davies, J. A., Bates, D. J. & Jones, C. J.) 583–592
Guanosine diphosphate mannose, transfer of mannose from, to dolichol diphosphate oligosaccharides by preparations of pig liver endoplasmic reticulum (Oliver, G. J. A. & Hemming, F. W.) 191–199

Heart, hyperthyroid rabbit and cardiomyopathic hamster, activities of phosphatidate phosphohydrolase and palmitoyl-coenzyme A hydrolase in subcellular fractions of (Kako, K. J. & Patterson, S. D.) 313–323
Heart, ox, action of tributyltin on energy coupling in coupling-factor-deficient submitochondrial particles from (Dawson, A. P. & Selwyn, M. J.) 333–339
Heart, rabbit, reversal by spermine of the inhibition by methylglyoxal bis(guanylhydrazone) of the biosynthesis of ribonucleic acid and the acetylation of histone in (Caldarera, C. M., Casti, A., Guarnieri, C. & Moruzzi, G.) 91–98
Heart, rat, perfused, effects of growth hormone and of cyclic nucleotides on the rapid control of the rate of the biosynthesis of protein in (Mowbray, J., Davies, J. A., Bates, D. J. & Jones, C. J.) 583–592
Heart, rat, perfused, isolated, release of adenosine 3′:5′-cyclic monophosphate from (O'Brien, J. A. & Strange, R. C.) 429–432
Helianthus tuberosus, *see* Artichoke
Heparin, inhibition by, and other glycosaminoglycans of the activities of human polymorphonuclear-leucocyte lysosomal enzymes *in vitro* (Avila, J. L. & Convit, J.) 57–64
Heparin, inhibition by colchicine of the stimulation by, of the release of clearing-factor lipase from isolated rat epididymal fat-cells (Cryer, A., McDonald, A., Williams, E. R. & Robinson, D. S.) 717–720
Hepatectomy, partial, metabolism of folates in rat liver during regeneration after (Barbiroli, B., Bovina, C., Tolomelli, B. & Marchetti, M.) 229–232
Hepatocytes, guinea-pig, isolated, gluconeogenesis by (Arinze, I. J. & Rowley, D. L.) 393–399
Hepatocytes, rat, isolated, effects of adenosine on the concentrations of adenine nucleotides and on metabolism in (Lund, P., Cornell, N. W. & Krebs, H. A.) 593–599
Hepatocytes, rat, isolated, effects of glucose and of potassium ion on the interconversion of the two forms of glycogen phosphorylase and of glycogen synthetase in, and perfused liver (Hue, L., Bontemps, F. & Hers, H.-G.) 105–114
Hepatoma, Novikoff, rat, characterization and changes in the concentration of the dexamethasone-binding protein of, during glucocorticoid therapy (Liu, S.-L. H., McNarmara, D. J. & Webb, T. E.) 689–695
Hepatoma, H5123, rat, initiation factors in the biosynthesis of protein by free and membrane-bound polyribosomes from rat liver and (Murty, C. N., Verney, E. & Sidransky, H.) 143–151

Hippurate, difference in the incorporation of ^{14}C from DL-[2-^{14}C]glutamate and DL-[5-^{14}C]glutamate into the glycine moiety of, in the guinea pig (Rowsell, K. V., Ali, T. A. J. & Rowsell, E. V.) 357–363
Histone, reversal by spermine of the inhibition by methylglyoxal bis(guanylhydrazone) of the biosynthesis of ribonucleic acid and the acetylation of, in rabbit heart (Caldarera, C. M., Casti, A., Guarnieri, C. & Moruzzi, G.) 91–98
Hordeum vulgare, *see* Barley
Hormones, control by, of the activities of luteal 20α-hydroxy steroid dehydrogenase and Δ^5-3β-hydroxy steroid dehydrogenase during luteolysis in the pregnant rat (Rodway, R. G. & Kuhn, N. J.) 433–443
Hydrocortisone, *see* Cortisol
Hydrogen ions, relationships between the translocation of, and the respiratory nitrate reductase of *Escherichia coli* K12 (Garland, P. B., Downie, J. A. & Haddock, B. A.) 547–559
Hydrogen ions, uptake of succinate and related movements of, in *Escherichia coli* K12 (Gutowski, S. J. & Rosenberg, H.) 647–654
Hydrogen isotope (^2H), measurement of the turnover of protein in duckweed by the use of density labelling with (Boudet, A., Humphrey, T. J. & Davies, D. D.) 409–416
Hydrolases, acid, lysosomal, polymorphonuclear-leucocyte, human, inhibition by glycosaminoglycans of the activities of, *in vitro* (Avila, J. L. & Convit, J.) 57–64
20α-Hydroxy steroid dehydrogenase, luteal, rat, activity of, and the formation of Δ^4-3-oxo steroids after weaning or treatment of the animal with 2-bromo-α-ergocryptine during lactation (Rodway, R. G. & Kuhn, N. J.) 445–448
20α-Hydroxy steroid dehydrogenase, luteal, rat, hormonal control of the activities of, and Δ^5-3β-hydroxy steroid dehydrogenase during luteolysis in the pregnant animal (Rodway, R. G. & Kuhn, N. J.) 433–443
Δ^5-3β-Hydroxy steroid dehydrogenase, luteal, rat, hormonal control of the activities of, and 20α-hydroxy steroid dehydrogenase during luteolysis in the pregnant animal (Rodway, R. G. & Kuhn, N. J.) 433–443
3-Hydroxyacyl-coenzyme A dehydrogenase, induction of the activities of, and other enzymes in the endosperm of germinating castor-bean seeds (Marriott, K. M. & Northcote, D. H.) 65–70
Hydroxylysine residues, glycosylation of, during the biosynthesis of collagen and the subcellular localization of collagen galactosyltransferase and collagen glucosyltransferase in chick-embryo tendon and cartilage cells (Harwood, R., Grant, M. E. & Jackson, D. S.) 291–302
Hyperthyroidism, activities of phosphatidate phosphohydrolase and palmitoyl-coenzyme A hydrolase in subcellular fractions of heart from cardiomyopathic hamsters and from rabbits with (Kako, K. J. & Patterson, S. D.) 313–323

Ileum, chick, effects of cholecalciferol on the translocation of calcium ions by a non-everted segment of, *in vitro* (Holdsworth, E. S., Jordan, J. E. & Keenan, E.) 181–190

Immunoglobulins, membrane-associated, reconstitution of pig lymphocyte plasma membranes from soluble components with particular reference to (Chavin, S. I. & Holliman, A.) 267–270
Informosomes, determination of the amount of, free in rat liver cytoplasm (Mullock, B. M. & Hinton, R. H.) 51–56
Inorganic phosphate, *see* Phosphate, inorganic
Insulin, activity of the pentose phosphate cycle in and the release of, by mouse islets of Langerhans isolated from starved animals (Hedeskov, C. J. & Capito, K.) 571–576
Intestine, small, chick, effects of cholecalciferol on the translocation of calcium ions by a non-everted segment of, *in vitro* (Holdsworth, E. S., Jordan, J. E. & Keenan, E.) 181–190
Intestine, small, guinea-pig, foetal and neonatal, activities of enzymes involved in the biosynthesis of glycerolipids in the mucosa of (Short, V. J., Dils, R. & Brindley, D. N.) 675–679
Intestine, small, guinea-pig, identification of the basolateral plasma membranes of epithelial cells from, by lactoperoxidase-catalysed iodination and their isolation after density perturbation with digitonin (Lewis, B. A., Elkin, A., Michell, R. H. & Coleman, R.) 71–84
Intestine, small, guinea-pig, purification and characterization of brush borders from (Andersen, K.-J., von der Lippe, G., Mørkrid, L. & Schjønsby, H.) 157–159
Intestine, small, rat, distribution of retinol and its metabolites in, and other tissues after the administration of [6,7-$^{14}C_2$,11,12-$^3H_2$]retinol to vitamin A-deficient animals (Sundaresan, P. R. & Sundaresan, G. M.) 99–104
Islets of Langerhans, mouse, isolated, biosynthesis of triacylglycerols and phospholipids in, from obese–hyperglycaemic animals (Berne, C.) 667–673
Islets of Langerhans, mouse, isolated, oxidation of fatty acids and ketone bodies in, from obese–hyperglycaemic animals (Berne, C.) 661–666
Islets of Langerhans, pancreas, mouse, activity of the pentose phosphate cycle in and the release of insulin by, isolated from starved animals (Hedeskov, C. J. & Capito, K.) 571–576
Isocitrate lyase, induction of the activities of, and other enzymes in the endosperm of germinating castor-bean seeds (Marriott, K. M. & Northcote, D. H.) 65–70
Isoprenaline, effect of, on the release of adenosine 3′:5′-cyclic monophosphate from isolated perfused rat heart (O'Brien, J. A. & Strange, R. C.) 429–432

Jerusalem artichoke, *see* Artichoke

Ketone bodies, oxidation of fatty acids and, in isolated islets of Langerhans from obese–hyperglycaemic mice (Berne, C.) 661–666
Kidney, chick-embryo, precocious development of glucuronidating and hydroxylating enzymes in, and liver after a pituitary-gland graft (Wishart, G. J. & Dutton, G. J.) 325–331
Kidney, rat, changes in the cellular composition in, and other tissues during magnesium deficiency (George, G. A. & Heaton, F. W.) 609–615
Kidney, rat, distribution of retinol and its metabolites in, and other tissues after the administration of [6,7-$^{14}C_2$,-11,12-$^3H_2$]retinol to vitamin A-deficient animals (Sundaresan, P. R. & Sundaresan, G. M.) 99–104
Kidney, rat, effects of diet and of hormones on the activities of phosphoenolpyruvate carboxykinase (guanosine triphosphate) in, and other tissues (Pogson, C. I. & Smith, S. A.) 401–408
Kidney, rat, regulation by thyroid hormone(s) of the turnover of mitochondrial proteins in, and liver and brain (Rajwade, M. S., Katyare, S. S., Fatterpaker, P. & Sreenivasan, A.) 379–387

Lactate, effects of adenosine on the concentrations of adenine nucleotides and on gluconeogenesis from, in isolated rat liver cells (Lund, P., Cornell, N. W. & Krebs, H. A.) 593–599
Lactate, equilibrium of the reaction catalysed by creatine kinase and the concentration of, in relation to the pH in tissue samples of human skeletal muscle obtained after isometric exercise (Sahlin, K., Harris, R. C. & Hultman, E.) 173–180
Lactation, activity of luteal 20α-hydroxy steroid dehydrogenase and the formation of Δ^4-3-oxo steroids in the rat after weaning or treatment with 2-bromo-α-ergocryptine during (Rodway, R. G. & Kuhn, N. J.) 445–448
Leaves, maize, developing, kinetics of incorporation of acetate and carbon dioxide into the fatty acid moieties of glycerolipids in, *in vivo* (Slack, C. R. & Roughan, P. G.) 217–228
Lecithin, *see* Phosphatidylcholine
Lectin, *Robinia pseudoacacia*, changes in the biosynthesis of deoxyribonucleic acid induced by, in cultured chick-embryo fibroblasts at various stages of development (Roguet, R. & Bourrillon, R.) 421–423
Lemna minor, *see* Duckweed
Leucocytes, polymorphonuclear, human, inhibition by glucosaminoglycans of the activities of lysosomal enzymes of, *in vitro* (Avila, J. L. & Convit, J.) 57–64
Leucyl-transfer ribonucleic acid synthetase, *Bascillus subtilis*, inhibition by granaticin of the activity of (Ogilvie, A., Wiebauer, K. & Kersten, W.) 511–515
Lipase, clearing-factor, inhibition by colchicine of the heparin-stimulated release of, from isolated rat epididymal fat-cells (Cryer, A., McDonald, A., Williams, E. R. & Robinson, D. S.) 717–720
Lipases, induction of the activities of, and other enzymes in the endosperm of germinating castor-bean seeds (Marriott, K. M. & Northcote, D. H.) 65–70
Lipids, activities of enzymes involved in the biosynthesis of, in the small-intestinal mucosa of foetal and neonatal guinea pigs (Short, V. J., Dils, R. & Brindley, D. N.) 675–679
Lipids, metabolism of, with special reference to the biosynthesis of triacylglycerols and phospholipids in isolated islets of Langerhans from obese–hyperglycaemic mice (Berne, C.) 667–673
Lipids, metabolism of, with special reference to the oxidation of fatty acids and ketone bodies in isolated islets of Langerhans from obese–hyperglycaemic mice (Berne, C.) 661–666
Lipogenesis, inhibition of, and stimulation of the breakdown of glycogen by vasopressin in perfused mouse liver (Ma, G. Y. & Hems, D. A.) 389–392
Lipoprotein lipase, *see* Lipase, clearing-factor
Liver cells, guinea-pig, isolated, gluconeogenesis by (Arinze, I. J. & Rowley, D. L.) 393–399

Liver cells, rat, isolated, effects of adenosine on the concentrations of adenine nucleotides and on metabolism in (Lund, P., Cornell, N. W. & Krebs, H. A.) 593–599

Liver cells, rat, isolated, effects of glucose and of potassium ions on the interconversion of the two forms of glycogen phosphorylase and of glycogen synthetase in, and perfused liver (Hue, L., Bontemps, F. & Hers, H.-G.) 105–114

Liver, chick-embryo, precocious development of glucuronidating and hydroxylating enzymes in, and kidney after a pituitary-gland graft (Wishart, G. J. & Dutton, G. J.) 325–331

Liver, mouse, formation of 4-aminobutyrate during the catabolism of putrescine in, and brain (Seiler, N. & Eichentopf, B.) 201–210

Liver, mouse, perfused, inhibition of the biosynthesis of fatty acids and stimulation of the breakdown of glycogen by vasopressin in (Ma, G. Y. & Hems, D. A.) 389–392

Liver, pig, transfer of mannose from guanosine diphosphate mannose to dolichol diphosphate oligosaccharides by preparations of endoplasmic reticulum from (Oliver, G. J. A. & Hemming, F. W.) 191–199

Liver, rat, activation and esterification of palmitate in microsomal fraction from (Lloyd-Davies, K. A. & Brindley, D. N.) 39–49

Liver, rat and sheep, conversion of acetyl-coenzyme A into acetate by the combined action of carnitine acetyltransferase and acetylcarnitine hydrolase in (Costa, N. D. & Snoswell, A. M.) 167–172

Liver, rat, changes in the cellular composition in, and other tissues during magnesium deficiency (George, G. A. & Heaton, F. W.) 609–615

Liver, rat, characterization and analysis by two-dimensional gel electrophoresis of enzymically iodinated ribosomal subunits from (Leader, D. P.) 373–378

Liver, rat, chloride ion-dependent restoration by oligomycin of the coupling of oxidative phosphorylation in mitochondria from (Ariel, N. & Avi-Dor, Y.) 115–119

Liver, rat, determination of the amount of small messenger-ribonucleic acid-containing particles free in the cytoplasm of (Mullock, B. M. & Hinton, R. H.) 51–56

Liver, rat, digestion of iodinated asialo-fetuin by lysosomes of (LaBadie, J. H., Chapman, K. P. & Aronson, N. N., Jr.) 271–279

Liver, rat, distribution of retinol and its metabolites in, and other tissues after the administration of [6,7-$^{14}C_2$,-11,12-$^{3}H_2$]retinol to vitamin A-deficient animals (Sundaresan, P. R. & Sundaresan, G. M.) 99–104

Liver, rat, effects of colchicine on the biosynthesis and secretion of serum albumin by (Dorling, P. R., Quinn, P. S. & Judah, J. D.) 341–348

Liver, rat, effects of diet and of hormones on the activities of phosphoenolpyruvate carboxykinase (guanosine triphosphate) in, and other tissues (Pogson, C. I. & Smith, S. A.) 401–408

Liver, rat and hamster, demethylation of dimethylnitrosamine by reconstituted microsomal cytochrome *P*-450 enzyme systems from (Lotlikar, P. D., Baldy, W. J. & Dwyer, E. N.) 705–708

Liver, rat, initiation factors in the biosynthesis of protein by free and membrane-bound polyribosomes from, and H5123 hepatoma (Murty, C. N., Verney, E. & Sidransky, H.) 143–151

Liver, rat, metabolism of folates in, during regeneration after partial hepatectomy (Barbiroli, B., Bovina, C., Tolomelli, B. & Marchetti, M.) 229–232

Liver, rat, perfused, acute effects of carbon monoxide on metabolism in (Topping, D. L.) 425–427

Liver, rat, perfused, effects of glucose and of potassium ions on the interconversion of the two forms of glycogen phosphorylase and of glycogen synthetase in, and isolated liver cells (Hue, L., Bontemps, F. & Hers, H.-G.) 105–114

Liver, rat, regulation by thyroid hormone(s) of the turnover of mitochondrial proteins in, and kidney and brain (Rajwade, M. S., Katyare, S. S., Fatterpaker, P. & Sreenivasan, A.) 379–387

Liver, rat, role of cytosol aldehyde dehydrogenase in the oxidation of acetaldehyde during the metabolism of ethanol in, *in vivo* (Eriksson, C. J. P., Marselos, M. & Koivula, T.) 709–712

Liver, rat, sheep and cow, enzymic hydrolysis of acetylcarnitine in (Costa, N. D. & Snoswell, A. M.) 161–166

Luteotrophin, human and sheep, influence of age on the response of the activities of alkaline phosphatases in immature mouse ovary to treatment with, and gonadotrophins (Bramley, T. A.) 365–372

Lymphocytes, pig, reconstitution of plasma membranes of, from soluble components with particular reference to membrane-associated immunoglobulins (Chavin, S. I. & Holliman, A.) 267–270

Lysine, evidence against the participation of the γ-glutamyltransferase–γ-glutamylcyclotransferase pathway in the transport of, and other amino acids by rabbit erythrocytes (Young, J. D., Ellory, J. C. & Wright, P. C.) 713–715

Lysosomes, liver, rat, digestion of iodinated asialo-fetuin by (LaBadie, J. H., Chapman, K. P. & Aronson, N. N., Jr.) 271–279

Lysosomes, polymorphonuclear-leucocyte, human, inhibition by glycosaminoglycans of the activities of enzymes from, *in vitro* (Avila, J. L. & Convit, J.) 57–64

Magnesium, changes in cellular composition in various rat tissues during deficiency of (George, G. A. & Heaton, F. W.) 609–615

Maize (*Zea mays*) leaves, developing, kinetics of incorporation of acetate and carbon dioxide into the fatty acid moieties of glycerolipids in, *in vivo* (Slack, C. R. & Roughan, P. G.) 217–228

Maize (*Zea mays*) shoots, etiolated, characterization of the terminal stages of the biosynthesis of chlorophyll(ide) in preparations of etioplast membranes isolated from, and barley (*Hordeum vulgare*) seedlings (Griffiths, W. T.) 623–635

Malonyl-coenzyme A, utilization of, for the elongation of fatty acids by rat brain microsomal fractions during development (Brophy, P. J. & Vance, D. E.) 495–501

Mammary gland, mouse, oestradiol-17β-stimulated, polyphasic changes in the biosynthesis of ribonucleic acid in (Auricchio, F., Satriano, R., Rotondi, A., Quirino, A. & Bresciani, F.) 211–216

Mammary gland, rat, concentration of glucose in milk as an index of the intracellular concentration of glucose in (Kuhn, N. J. & White, A.) 153–155

Mannose, transfer of, from guanosine diphosphate mannose to dolichol diphosphate oligosaccharides by preparations of pig liver endoplasmic reticulum (Oliver, G. J. A. & Hemming, F. W.) 191–199
Membrane, ciliary, *Paramecium aurelia*, characterization of and relationship between the major protein of, and the immobilization antigen (Hansma, H. G. & Kung, C.) 523–528
Membrane, cytoplasmic, *Escherichia coli* K12, relationship between the activity of respiratory nitrate reductase and the translocation of protons across (Garland, P. B., Downie, J. A. & Haddock, B. A.) 547–559
Membrane, outer, forespore, *Bacillus megaterium* KM, biochemical evidence for the reversed polarity of (Wilkinson, B. J., Deans, J. A. & Ellar, D. J.) 561–569
Membrane, plasma, brain-cell, hamster, mouse and human, cultured, association of particulate adenosine deaminase with (Trams, E. G. & Lauter, C. J.) 681–687
Membranes, *Escherichia coli* K12, linkage of functional anaerobic electron transport to the reduction of nitrate or fumarate in, as demonstrated by quenching of atebrin fluorescence (Haddock, B. A. & Kendall-Tobias, M. W.) 655–659
Membranes, etioplast, barley and maize, characterization of the terminal stages of the biosynthesis of chlorophyll(ide) in preparations of (Griffiths, W. T.) 623–635
Membranes, plasma, basolateral, epithelial-cell, small-intestine, guinea-pig, identification of, by lactoperoxidase-catalysed iodination and their isolation after density perturbation with digitonin (Lewis, B. A., Elkin, A., Michell, R. H. & Coleman, R.) 71–84
Membranes, plasma, lymphocyte, pig, reconstitution of, from soluble components with particular reference to membrane-associated immunoglobulins (Chavin, S. I. & Holliman, A.) 267–270
Membranes, thyroid-gland, ox, use of zonal centrifugation in a study of (Hilderson, H. J. J., De Wolf, M. J. S., Lagrou, A. R. & Dierick, W. S. H.) 601–607
Messenger ribonucleic acid, *see* Ribonucleic acid, messenger
Methanol, electron-transport chain of *Pseudomonas* AM1 grown on (Widdowson, D. & Anthony, C.) 349–356
[*Me*-^{13}C]Methionine, ^{13}C nuclear-magnetic-resonance spectroscopy of whole cells and of cytochorme *c* from *Neurospora crassa* grown in the presence of (Eakin, R. T., Morgan, L. O. & Matwiyoff, N. A.) 529–535
Methyl Viologen, thermochemical characterization of sodium dithionite, flavin mononucleotide, flavin-adenine dinucleotide, Benzyl Viologen and, as low-potential reductants for biological systems (Watt, G. D. & Burns, A.) 33–37
1,1′-[(Methylethanediylidene)dinitrilo]guanidine [methylglyoxal bis(guanylhydrazone)], reversal by spermine of the inhibition by, of the biosynthesis of ribonucleic acid and the acetylation of histone in rabbit heart (Caldarera, C. M., Casti, A., Guarnieri, C. & Moruzzi, G.) 91–98
Methylglyoxal bis(guanylhydrazone) {1,1′-[(methylethanediylidene)dinitrilo]guanidine}, reversal by spermine of the inhibition by, of the biosynthesis of ribonucleic acid and the acetylation of histone in rabbit heart (Caldarera, C. M., Casti, A., Guarnieri, C. & Moruzzi, G.) 91–98
N^{τ}-Methylhistidine, turnover of skeletal-muscle myofibrillar protein and the urinary excretion of, in response to dietary supply of protein and energy in the rat (Haverberg, L. N., Deckelbaum, L., Bilmazes, C., Munro, H. N. & Young, V. R.) 503–510
Methylotrophic bacteria, electron-transport chain of (Widdowson, D. & Anthony, C.) 349–356
Microsomal fraction, liver and kidney, rat, changes in, and mitochondria during magnesium deficiency (George, G. A. & Heaton, F. W.) 609–615
Microsomal fraction, liver, pig, transfer of mannose from guanosine diphosphate mannose to dolichol diphosphate oligosaccharides by (Oliver, G. J. A. & Hemming, F. W.) 191–199
Microsomal fraction, liver, rat, activation and esterification of palmitate in (Lloyd-Davies, K. A. & Brindley, D. N.) 39–49
Microsomal fractions, brain, rat, elongation of fatty acids by, during development (Brophy, P. J. & Vance, D. E.) 495–501
Microsomal fractions, liver, rat and hamster, demethylation of dimethylnitrosamine by reconstituted cytochrome *P*-450 enzyme systems from (Lotlikar, P. D., Baldy, W. J. & Dwyer, E. N.) 705–708
Milk, rat, concentration of glucose in, as an index of the intracellular concentration of glucose in the mammary gland (Kuhn, N. J. & White, A.) 153–155
Mitochondria, adipose-tissue, epididymal, rat, isolated, oxidation of fatty acids in (Harper, R. D. & Saggerson, E. D.) 485–494
Mitochondria, artichoke, activation by adenine nucleotides of non-phosphorylating electron transport in (Sotthibandhu, R. & Palmer, J. M.) 637–645
Mitochondria, brain, rat, adult, subcellular localization of 4-aminobutyrate aminotransferase and glutamate dehydrogenase in, and evidence for at least two small glutamate compartments (Reijnierse, G. L. A., Veldstra, H. & Van den Berg, C. J.) 469–475
Mitochondria, brain, rat, changes in the activities and subcellular localization of short-chain fatty acyl-coenzyme A synthases in, during development (Reijnierse, G. L. A., Veldstra, H. & Van den Berg, C. J.) 477–484
Mitochondria, heart, ox, action of tributyltin on energy coupling in coupling-factor-deficient submitochondrial particles from (Dawson, A. P. & Selwyn, M. J.) 333–339
Mitochondria, liver and kidney, rat, changes in, and microsomal fraction during magnesium deficiency (George, G. A. & Heaton, F. W.) 609–615
Mitochondria, liver, kidney and brain, rat, regulation by thyroid hormone(s) of the turnover of proteins of (Rajwade, M. S., Katyare, S. S., Fatterpaker, P. & Sreenivasan, A.) 379–387
Mitochondria, liver, rat, chloride ion-dependent restoration by oligomycin of the coupling of oxidative phosphorylation in (Ariel, N. & Avi-Dor, Y.) 115–119
Mitochondria, salivary-gland, *Drosophila hydei*-larva, induced transcription-dependent biosynthesis of reduced nicotinamide–adenine dinucleotide dehydrogenase in (Koninkx, J. F. J. G.) 17–22
Monoamine oxidase, effects of inhibitors of 4-aminobutyrate aminotransferase, diamine oxidase and, on the catabolism of putrescine in mouse brain and liver (Seiler, N. & Eichentopf, B.) 201–210

Mucosa, small-intestinal, guinea-pig, foetal and neonatal, activities of enzymes involved in the biosynthesis of glycerolipids in (Short, V. J., Dils, R. & Brindley, D. N.) 675–679
Muscle, heart, rat, effects of growth hormone and of cyclic nucleotides on the rapid control of the rate of the biosynthesis of protein in (Mowbray, J., Davies, J. A., Bates, D. J. & Jones, C. J.) 583–592
Muscle, skeletal, human, equilibrium of the reaction catalysed by creatine kinase and the concentration of lactate in relation to the pH in tissue samples of, obtained after isometric exercise (Sahlin, K., Harris, R. C. & Hultman, E.) 173–180
Muscle, skeletal, rabbit, purification and characterization of collagenase extracted from V_2 ascites-cell carcinoma growing in (McCroskery, P. A., Richards, J. F. & Harris, E. D., Jr.) 131–142
Muscle, skeletal, rat, turnover of myofibrillar protein and the urinary excretion of N^{τ}-methylhistidine in response to dietary supply of protein and energy (Haverberg, L. N., Deckelbaum, L., Bilmazes, C., Munro, H. N. & Young, V. R.) 503–510
Muscle, vertebrate and invertebrate, resting, contents of adenine nucleotides, phosphagens and some glycolytic intermediates in (Beis, I. & Newsholme, E. A.) 23–32
Muscular exercise, isometric, equilibrium of the reaction catalysed by creatine kinase and the concentration of lactate in relation to the pH in tissue samples of human skeletal muscle obtained after (Sahlin, K., Harris, R. C. & Hultman, E.) 173–180
Myelin, presence in cultured rat C-6 glial cells of 2′:3′-cyclic nucleotide 3′-phosphohydrolase and other proteins characteristic of (Volpe, J. J., Fujimoto, K., Marasa, J. C. & Agrawal, H. C.) 701–703
Myofibrils, skeletal-muscle, rat, turnover of the protein of, and the urinary excretion of N^{τ}-methylhistidine in response to dietary supply of protein and energy (Haverberg, L. N., Deckelbaum, L., Bilmazes, C., Munro, H. N. & Young, V. R.) 503–510

Neurospora crassa, ^{13}C nuclear-magnetic-resonance spectroscopy of whole cells and of cytochrome *c* from, grown in the presence of [*Me*-^{13}C]methionine (Eakin, R. T., Morgan, L. O. & Matwiyoff, N. A.) 529–535
Nicotinamide–adenine dinucleotide phosphate, reduced, role of, in the biosynthesis of chlorophyll(ide) from protochlorophyll(ide) in preparations of barley and maize etioplast membranes (Griffiths, W. T.) 623–635
Nicotinamide–adenine dinucleotide (reduced) dehydrogenase, mitochondrial, salivary-gland, *Drosophila hydei* larva, induced transcription-dependent biosynthesis of (Koninkx, J. F. J. G.) 17–22
Nicotinamide–adenine dinucleotide (reduced) dehydrogenase, regulation by adenine nucleotides of the activity of, in artichoke mitochondria (Sotthibandhu, R. & Palmer, J. M.) 637–645
Nitrate, linkage of functional anaerobic electron transport to the reduction of fumarate or, in *Escherichia coli* K12 membranes as demonstrated by quenching of atebrin fluorescence (Haddock, B. A. & Kendall-Tobias, M. W.) 655–659
Nitrate reductase, respiratory, *Escherichia coli* K12, relationship between the translocation of protons and (Garland, P. B., Downie, J. A. & Haddock, B. A.) 547–559
Noradrenaline, changes in the binding of adenosine 3′:5′-cyclic monophosphate to newborn rabbit brown-fat adenosine 3′:5′-cyclic monophosphate-dependent protein kinase after preincubation of the tissue with (Knight, B. L.) 577–582
Novikoff hepatoma, rat, characterization and changes in the concentration of the dexamethasone-binding protein of, during glucocorticoid therapy (Liu, S.-L. H., McNamara, D. J. & Webb, T. E.) 689–695
Nuclei, Novikoff-hepatoma, rat, changes in the concentration of the dexamethasone-binding protein and the uptake of dexamethasone by, during glucocorticoid therapy (Liu, S.-L. H., McNamara, D. J. & Webb, T. E.) 689–695
Nucleotides, cyclic, effects of growth hormone and of, on the rapid control of the rate of biosynthesis of protein in perfused rat heart (Mowbray, J., Davies, J. A., Bates, D. J. & Jones, C. J.) 583–592

Obelia geniculata, use of the calcium ion-activated luminescent protein obelin from, in a study of the permeability to calcium ions of pigeon erythrocyte 'ghosts' (Campbell, A. K. & Dormer, R. L.) 255–265
Obelin, use of, in a study of the permeability to calcium ions of pigeon erythrocyte 'ghosts' (Campbell, A. K. & Dormer, R. L.) 255–265
Oestradiol-17β, polyphasic changes in the biosynthesis of ribonucleic acid in mouse mammary gland stimulated by (Auricchio, F., Satriano, R., Rotondi, A., Quirino, A. & Bresciani, F.) 211–216
Oestrogens, polyphasic changes in the biosynthesis of ribonucleic acid in mouse mammary gland stimulated by (Auricchio, F., Satriano, R., Rotondi, A., Quirino, A. & Bresciani, F.) 211–216
Oleate, involvement of phosphatidylcholine in the desaturation of, in developing maize leaves (Slack, C. R. & Roughan, P. G.) 217–228
Oligomycin, chloride ion-dependent restoration by, of the coupling of oxidative phosphorylation in rat liver mitochondria (Ariel, N. & Avi-Dor, Y.) 115–119
Oligosaccharides, dolichol diphosphate-linked, transfer of mannose from guanosine diphosphate mannose to, by preparations of pig liver endoplasmic reticulum (Oliver, G. J. A. & Hemming, F. W.) 191–199
Orotate, effect of convulsions induced by flurothyl on the incorporation of, into ribonucleic acid in rat cerebral cortex during the recovery phase (Wynter, C. V. A., Ioannou, P. & Mathias, A. P.) 449–467
Ovary, mouse, immature, influence of age on the response of the activities of alkaline phosphatases in, to treatment with gonadotrophins (Bramley, T. A.) 365–372
Oxidative phosphorylation, *see* Phosphorylation, oxidative
Δ^4-3-Oxo steroids, activity of luteal 20α-hydroxy steroid dehydrogenase and the formation of, in the rat after weaning or treatment with 2-bromo-α-ergocryptine during lactation (Rodway, R. G. & Kuhn, N. J.) 445–448
Oxygen, acute effects of carbon monoxide on the consumption of, and on metabolism by perfused rat liver (Topping, D. L.) 425–427

Palmitate, activation and esterification of, in rat liver microsomal fraction (Lloyd-Davies, K. A. & Brindley, D. N.) 39–49

Palmitate, incorporation of glucose and, into lipids in isolated islets of Langerhans from obese–hyperglycaemic mice (Berne, C.) 667–673
Palmitoyl-coenzyme A hydrolase, activities of phosphatidate phosphohydrolase and, in subcellular fractions of heart from hyperthyroid rabbits and from cardiomyopathic hamsters (Kako, K. J. & Patterson, S. D.) 313–323
Palmitoyl-coenzyme A synthetase, relationship between the activities of glycerol phosphate acyltransferase and, and the rate of biosynthesis of glycerolipids in rat liver microsomal fraction (Lloyd-Davies, K. A. & Brindley, D. N.) 39–49
Pancreas, mouse, activity of the pentose phosphate cycle in and the release of insulin by islets of Langerhans isolated from, during starvation (Hedeskov, C. J. & Capito, K.) 571–576
Pancreas, mouse, biosynthesis of triacylglycerols and phospholipids in islets of Langerhans isolated from, of obese–hyperglycaemic animals (Berne, C.) 667–673
Pancreas, mouse, oxidation of fatty acids and ketone bodies in islets of Langerhans isolated from, of obese–hyperglycaemic animals (Berne, C.) 661–666
Paramecium aurelia, characterization of and relationship between the major ciliary membrane protein and the immobilization antigen of (Hansma, H. G. & Kung, C.) 523–528
Pentose phosphate cycle, activity of, in and the release of insulin by mouse islets of Langerhans isolated from starved animals (Hedeskov, C. J. & Capito, K.) 571–576
pH, equilibrium of the reaction catalysed by creatine kinase and the concentration of lactate in relation to, in tissue samples of human skeletal muscle obtained after isometric exercise (Sahlin, K., Harris, R. C. & Hultman, E.) 173–180
Phenyl acetate, identification of, as an intermediate in the metabolism of acetophenone by *Arthrobacter* sp. (Cripps, R. E.) 233–241
Phenylalanine, evidence against the participation of the γ-glutamyltransferase–γ-glutamylcyclotransferase pathway in the transport of, and other amino acids by rabbit erythrocytes (Young, J. D., Ellory, J. C. & Wright, P. C.) 713–715
Phenylalanine, initiation factors in the incorporation of, into protein by free and membrane-bound polyribosomes from rat liver and H5123 hepatoma (Murty, C. N., Verney, E. & Sidransky, H.) 143–151
Phenylalanine, investigation of the location and possible compartmentation of the precursor pool of, for the biosynthesis of protein in human granulocytes (Blackburn, M. J., Andrews, T. M. & Watts, R. W. E.) 697–700
Phosphagens, contents of adenine nucleotides, some glycolytic intermediates and, in resting muscles from various vertebrates and invertebrates (Beis, I. & Newsholme, E. A.) 23–32
Phosphatase, alkaline, cytochemical studies on the production of, during sporulation in *Bacillus subtilis* 168 (Glenn, A. R. & Coote, J. G.) 85–89
Phosphatases, alkaline, influence of age on the response of the activities of, in immature mouse ovary to treatment with gonadotrophins (Bramley, T. A.) 365–372
Phosphate, inorganic, relationships between the exchange of calcium ions and, in isolated rat epididymal fat-cells (Martin, B. R., Clausen, T. & Gliemann, J.) 121–129
Phosphatidate phosphohydrolase, activities of palmitoyl-coenzyme A hydrolase and, in subcellular fractions of heart from hyperthyroid rabbits and from cardiomyopathic hamsters (Kako, K. J. & Patterson, S. D. 313–323
Phosphatidylcholine, involvement of, in the desaturation of oleate in developing maize leaves (Slack, C. R. & Roughan, P. G.) 217–228
Phosphoarginine, *see* Arginine phosphate
Phosphocreatine, *see* Creatine phosphate
Phosphoenolpyruvate carboxykinase (guanosine triphosphate), effects of diet and of hormones on the activities of, in various rat tissues (Pogson, C. I. & Smith, S. A.) 401–408
Phospholipids, biosynthesis of triacylglycerols and, in isolated islets of Langerhans from obese–hyperglycaemic mice (Berne, C.) 667–673
Phospholipids, distribution of, throughout ox thyroid-gland membranes (Hilderson, H. J. J., De Wolf, M. J. S., Lagrou, A. R. & Dierick, W. S. H.) 601–607
Phosphorylase, *see* Glycogen phosphorylase
Phosphorylation, oxidative, chloride ion-dependent restoration by oligomycin of the coupling of, in rat liver mitochondria (Ariel, N. & Avi-Dor, Y.) 115–119
Pigeon, use of the calcium ion-activated luminescent protein obelin in a study of the permeability to calcium ions of erythrocyte 'ghosts' from (Campbell, A. K. & Dormer, R. L.) 255–265
Pituitary-gland graft, precocious development of glucuronidating and hydroxylating enzymes in liver and kidney of chick embryo treated with (Wishart, G. J. & Dutton, G. J.) 325–331
Plasma, calculation of errors and the choice of sampling times in the determination of rates of irreversible disposal of substrates in, *in vivo* in experiments with isotopically labelled compounds (Heath, D. F. & Cunningham, V. J.) 417–420
Plasma membrane, *see* Membrane, plasma
Polyamines, reversal by, of the inhibition by methylglyoxal bis(guanylhydrazone) of the biosynthesis of ribonucleic acid and the acetylation of histone in rabbit heart (Caldarera, C. M., Casti, A., Guarnieri, C. & Moruzzi, G.) 91–98
Polymannuronate 5-epimerase, role of, in the biosynthesis of alginate by *Azotobacter vinelandii* N.C.I.B. 9068 (Pindar, D. F. & Bucke, C.) 617–622
Polymorphonuclear leucocytes, *see* Leucocytes, polymorphonuclear
Polyribosomes, liver and H5123-hepatoma, rat, free and membrane-bound, initiation factors in the biosynthesis of protein by (Murty, C. N., Verney, E. & Sidransky, H.) 143–151
Polysomes, *see* Polyribosomes
Potassium ions, effects of glucose and of, on the interconversion of the two forms of glycogen phosphorylase and of glycogen synthetase in rat liver preparations (Hue, L., Bontemps, F. & Hers, H.-G.) 105–114
Pregnancy, hormonal control of the activities of luteal 20α-hydroxy steroid dehydrogenase and Δ^5-3β-hydroxy steroid hydrogenase during luteolysis in the rat during (Rodway, R. G. & Kuhn, N. J.) 433–443

Prostaglandins, regulation by, of the biosynthesis and hydrolysis of cholesteryl esters by subcellular fractions of rat skin (Ziboh, V. A. & Dreize, M. A.) 281–289
Prostate gland, ventral, rat, regulation by androgens of the activities of enzymes engaged in the biosynthesis of deoxyribonucleic acid in (Rennie, P. S., Symes, E. K. & Mainwaring, W. I. P.) 1–16
Protein, dexamethasone-binding, Novikoff-hepatoma, rat, characterization and changes in the concentration of, during glucocorticoid therapy (Liu, S.-L. H., McNamara, D. J. & Webb, T. E.) 689–695
Protein, effects of growth hormone and of cyclic nucleotides on the rapid control of the rate of biosynthesis of, in perfused rat heart (Mowbray, J., Davies, J. A., Bates, D. J. & Jones, C. J.) 583–592
Protein, initiation factors in the biosynthesis of, by free and membrane-bound polyribosomes from rat liver and H5123 hepatoma (Murty, C. N., Verney, E. & Sidransky, H.) 143–151
Protein, investigation of the location and possible compartmentation of the precursor pool of phenylalanine for the biosynthesis of, in human granulocytes (Blackburn, M. J., Andrews, T. M. & Watts, R. W. E.) 697–700
Protein kinase, adenosine 3′:5′-cyclic monophosphate-dependent, brown-fat, rabbit, newborn, changes in the binding of adenosine 3′:5′-cyclic monophosphate to, after preincubation of the tissue with noradrenaline or after incubation of the enzyme with adenosine triphosphate (Knight, B. L.) 577–582
Protein, measurement of the turnover of, in duckweed by the use of density labelling with deuterium oxide (Boudet, A., Humphrey, T. J. & Davies, D. D.) 409–416
Protein, membrane, ciliary, *Paramecium aurelia*, major, characterization of, and its relationship to the immobilization antigen (Hansma, H. G. & Kung, C.) 523–528
Protein, myofibrillar, skeletal-muscle, rat, turnover of, and the urinary excretion of N^{τ}-methylhistidine in response to dietary supply of protein and energy (Haverberg, L. N., Deckelbaum, L., Bilmazes, C., Munro, H. N. & Young, V. R.) 503–510
Proteins, mitochondrial, regulation by thyroid hormone(s) of the turnover of, in rat liver, kidney and brain (Rajwade, M. S., Katyare, S. S., Fatterpaker, P. & Sreenivasan, A.) 379–387
Proteins, ribosomal, characterization and analysis by two-dimensional gel electrophoresis of, prepared from enzymically iodinated rat liver ribosomal subunits (Leader, D. P.) 373–378
Protochlorophyll(ide), characterization of the stages of the biosynthesis of chlorophyll(ide) from, in preparations of barley and maize etioplast membranes (Griffiths, W. T.) 623–635
Protons, relationship between the translocation of, and the respiratory nitrate reductase of *Escherichia coli* K12 (Garland, P. B., Downie, J. A. & Haddock, B. A.) 547–559
Protons, uptake of succinate and related movements of, in *Escherichia coli* K12 (Gutowski, S. J. & Rosenberg, H.) 647–654
Pseudomonas AM1, electron-transport chain of (Widdowson, D. & Anthony, C.) 349–356
Putrescine, formation of 4-aminobutyrate during the catabolism of, in mouse brain and liver (Seiler, N. & Eichentopf, B.) 201–210

Red blood cells, *see* Erythrocytes
Reticulum, endoplasmic, liver, pig, transfer of mannose from guanosine diphosphate mannose to dolichol diphosphate oligosaccharides by preparations of (Oliver, G. J. A. & Hemming, F. W.) 191–199
Reticulum, endoplasmic, thyroid-gland, use of zonal centrifugation in a study of, and other membranes (Hilderson, H. J. J., De Wolf, M. J. S., Lagrou, A. R. & Dierick, W. S. H.) 601–607
Retinol, tissue distribution of, and its metabolites after the administration of [6,7-$^{14}C_2$,11,12-$^{3}H_2$]retinol to vitamin A-deficient rats (Sundaresan, P. R. & Sundaresan, G. M.) 99–104
Ribonucleic acid, effect of convulsions induced by flurothyl on the biosynthesis of, in rat cerebral cortex during the recovery phase (Wynter, C. V. A., Ioannou, P. & Mathias, A. P.) 449–467
Ribonucleic acid, messenger, determination of the amount of small particles containing, free in rat liver cytoplasm (Mullock, B. M. & Hinton, R. H.) 51–56
Ribonucleic acid, messenger, β-galactosidase, theoretical analysis of the induced initiation, accumulation and translation of, in *Escherichia coli* B/r (Young, R. & Bremer, H.) 243–254
Ribonucleic acid, polyadenylate-containing, determination of the amount of, in the fraction containing ribosomal subparticles prepared from rat liver cytoplasm (Mullock, B. M. & Hinton, R. H.) 51–56
Ribonucleic acid, polyphasic changes in the biosynthesis of, in oestradiol-17β-stimulated mouse mammary gland (Auricchio, F., Satriano, R., Rotondi, A., Quirino, A. & Bresciani, F.) 211–216
Ribonucleic acid, reversal by spermine of the inhibition by methylglyoxal bis(guanylhydrazone) of the acetylation of histone and the biosynthesis of, in rabbit heart (Caldarera, C. M., Casti, A., Guarnieri, C. & Moruzzi, G.) 91–98
Ribonucleic acid, stringent control of the biosynthesis of, in *Bacillus subtilis* treated with granaticin (Ogilvie, A., Wiebauer, K. & Kersten, W.) 517–522
Ribonucleic acid, transfer, leucine, inhibition by granaticin of the charging of, in *Bacillus subtilis* (Ogilvie, A., Wiebauer, K. & Kersten, W.) 511–515
Ribonucleoprotein particles, determination of the amount of small messenger-ribonucleic acid-containing particles in the fraction containing, prepared from rat liver cytoplasm (Mullock, B. M. & Hinton, R. H.) 51–56
Ribosomal subunits, liver, rat, enzymically iodinated, characterization and analysis by two-dimensional gel electrophoresis of (Leader, D. P.) 373–378
Ricinus communis, *see* Bean, castor
Robinia pseudoacacia lectin, changes in the biosynthesis of deoxyribonucleic acid induced by, in cultured chick-embryo fibroblasts at various stages of development (Roguet, R. & Bourrillon, R.) 421–423

Salivary gland, *Drosophila hydei*-larva, induced transcription-dependent biosynthesis of reduced nicotinamide–adenine dinucleotide dehydrogenase in mitochondria from (Koninkx, J. F. J. G.) 17–22

Seeds, castor-bean, germinating, induction of enzyme activities in the endosperm of (Marriott, K. M. & Northcote, D. H.) 65–70
Serum albumin, *see* Albumin, serum
Skeletal muscle, *see* Muscle, skeletal
Skin, rat, regulation by prostaglandins of the biosynthesis and hydrolysis of cholesteryl esters by subcellular fractions of (Ziboh, V. A. & Dreize, M. A.) 281–289
Small intestine, *see* Intestine, small
Somatotrophin, *see* Growth hormone
Spermine, reversal by, of the inhibition by methylglyoxal bis(guanylhydrazone) of the biosynthesis of ribonucleic acid and the acetylation of histone in rabbit heart (Caldarera, C. M., Casti, A., Guarnieri, C. & Moruzzi, G.) 91–98
Spinacea oleracea, *see* Spinach
Spinach (*Spinacea oleracea*), thermochemical characterization of sodium dithionite, flavin mononucleotide, flavin–adenine dinucleotide, Methyl Viologen and Benzyl Viologen as low-potential reductants for ferredoxin from, and other biological systems (Watt, G. D. & Burns, A.) 33–37
Spleen, rat, distribution of retinol and its metabolites in, and other tissues after the administration of [6,7-$^{14}C_2$,-11,12-$^3H_2$]retinol to vitamin A-deficient animals (Sundaresan, P. R. & Sundaresan, G. M.) 99–104
Spore, fore-, *Bacillus megaterium* KM, biochemical evidence for the reversed polarity of the outer membrane of (Wilkinson, B. J., Deans, J. A. & Ellar, D. J.) 561–569
Sporulation, cytochemical studies on the production of alkaline phosphatase during, in *Bacillus subtilis* 168 (Glenn, A. R. & Coote, J. G.) 85–89
Starvation, activity of the pentose phosphate cycle in and the release of insulin by islets of Langerhans isolated from mouse pancreas during (Hedeskov, C. J. & Capito, K.) 571–576
Starvation, effects of, on the activities of phosphoenolpyruvate carboxykinase (guanosine triphosphate) in various rat tissues (Pogson, C. I. & Smith, S. A.) 401–408
Steroid hormones, effects of, on the activities of phosphoenolpyruvate carboxykinase (guanosine triphosphate) in various rat tissues (Pogson, C. I. & Smith, S. A.) 401–408
Steroids, androgenic, regulation by, of the activities of enzymes engaged in the biosynthesis of deoxyribonucleic acid in rat ventral prostate gland (Rennie, P. S., Symes, E. K. & Mainwaring, W. I. P.) 1–16
Steroids, glucocorticoid, changes in the concentration of the dexamethasone-binding protein and in the nuclear uptake of dexamethasone of rat Novikoff hepatoma during therapy with (Liu, S.-L. H., McNamara, D. J. & Webb, T. E.) 689–695
Sterol esters, regulation by prostaglandins of the biosynthesis and hydrolysis of, by subcellular fractions of rat skin (Ziboh, V. A. & Dreize, M. A.) 281–289
Submitochondrial particles, heart, ox, coupling-factor-deficient, action of tributyltin on energy coupling in (Dawson, A. P. & Selwyn, M. J.) 333–339
Substrates, plasma, calculation of errors and the choice of sampling times in the determination of rates of irreversible disposal of, *in vivo* in experiments with isotopically labelled compounds (Heath, D. F. & Cunningham, V. J.) 417–420
Succinate, uptake of, and related movements of protons in *Escherichia coli* K12 (Gutowski, S. J. & Rosenberg, H.) 647–654
Sulphate, effects of limitation of, in the medium during growth in continuous culture of *Escherichia coli* K12 on the electron-transport chain and energy conservation in (Poole, R. K. & Haddock, B. A.) 537–546
Supernatant fraction, *see* Cytosol

Tendon cells, chick-embryo, glycosylation of hydroxylysine residues during the biosynthesis of collagen and the subcellular localization of collagen galactosyltransferase and collagen glucosyltransferase in, and cartilage cells (Harwood, R., Grant, M. E. & Jackson, D. S.) 291–302
Testosterone, regulation by, of the activities of enzymes engaged in the biosynthesis of deoxyribonucleic acid in rat ventral prostate gland (Rennie, P. S., Symes, E. K. & Mainwaring, W. I. P.) 1–16
Thymidine, changes in the incorporation of, into deoxyribonucleic acid induced by lectins in cultured chick-embryo fibroblasts at various stages of development (Roguet, R. & Bourrillon, R.) 421–423
Thymidine kinase, regulation by androgens of the activities of, and other enzymes engaged in the biosynthesis of deoxyribonucleic acid in rat ventral prostate gland (Rennie, P. S., Symes, E. K. & Mainwaring, W. I. P.) 1–16
Thyroid gland, ox, use of zonal centrifugation in a study of membranes from (Hilderson, H. J. J., De Wolf, M. J. S., Lagrou, A. R. & Dierick, W. S. H.) 601–607
Thyroid hormone(s), regulation by, of the turnover of mitochondrial proteins in rat liver, kidney and brain (Rajwade, M. S., Katyare, S. S., Fatterpaker, P. & Sreenivasan, A.) 379–387
Transcription, dependence on, of induced biosynthesis of reduced nicotinamide–adenine dinucleotide dehydrogenase in *Drosophila hydei*-larva salivary-gland mitochondria (Koninkx, J. F. J. G.) 17–22
Transfer ribonucleic acid, *see* Ribonucleic acid, transfer
Translation, effects of growth hormone and of cyclic nucleotides on the rapid control of, in perfused rat heart (Mowbray, J., Davies, J. A., Bates, D. J. & Jones, C. J.) 583–592
Triacylglycerols, biosynthesis of phospholipids and, in isolated islets of Langerhans from obese–hyperglycaemic mice (Berne, C.) 667–673
Tributyltin, action of, on energy coupling in coupling-factor-deficient submitochondrial particles from ox heart (Dawson, A. P. & Selwyn, M. J.) 333–339
Triglycerides, *see* Triacylglycerols
L-Tryptophan, effects of, on the activities of phosphoenolpyruvate carboxykinase (guanosine triphosphate) in various rat tissues (Pogson, C. I. & Smith, S. A.) 401–408
Tumour, V_2 ascites-cell, purification and characterization of collagenase extracted from, growing in rabbit skeletal muscle (McCroskery, P. A., Richards, J. F. & Harris, E. D., Jr.) 131–142
Tyrosine, effects of growth hormone and of cyclic nucleotides on the rapid control of the rate of incorporation of, into protein in perfused rat heart (Mowbray, J., Davies, J. A., Bates, D. J. & Jones, C. J.) 583–592

Uridine diphosphate glucuronyltransferase, precocious development of aniline hydroxylase and, in chick embryo treated with a pituitary-gland graft (Wishart, G. J. & Dutton, G. J.) 325–331

Uridine, polyphasic changes in the incorporation of, into ribonucleic acid in oestradiol-17β-stimulated mouse mammary gland (Auricchio, F., Satriano, R., Rotondi, A., Quirino, A. & Bresciani, F.) 211–216

Urine, difference in the incorporation of ^{14}C from DL-[2-^{14}C]glutamate and DL-[5-^{14}C]glutamate into the glycine moiety of hippurate in, of the guinea pig (Rowsell, K. V., Ali, T. A. J. & Rowsell, E. V.) 357–363

Urine, turnover of skeletal-muscle myofibrillar protein and the excretion of N^{τ}-methylhistidine in, in response to dietary supply of protein and energy in the rat (Haverberg, L. N., Deckelbaum, L., Bilmazes, C., Munro, H. N. & Young, V. R.) 503–510

Vasopressin, inhibition of the biosynthesis of fatty acids and stimulation of the breakdown of glycogen by, in perfused mouse liver (Ma, G. Y. & Hems, D. A.) 389–392

Vitamin A, tissue distribution of retinol and its metabolites after the administration of [6,7-$^{14}C_2$,11,12-$^{3}H_2$]-retinol to rats deficient in (Sundaresan, P. R. & Sundaresan, G. M.) 99–104

Vitamin D-3, *see* Cholecalciferol

Water, changes in the cellular content of, in various rat tissues during magnesium deficiency (George, G. A. & Heaton, F. W.) 609–615

Weaning, activity of luteal 20α-hydroxy steroid dehydrogenase and the formation of Δ^4-3-oxo steroids in the rat after, or treatment with 2-bromo-α-ergocryptine during lactation (Rodway, R. G. & Kuhn, N. J.) 445–448

Zea mays, *see* Maize